CFD-7/8

SERVICE MANUAL

AEP Model
UK Model
Australian Model
E Model
CFD-8

AEP Model
CFD-7

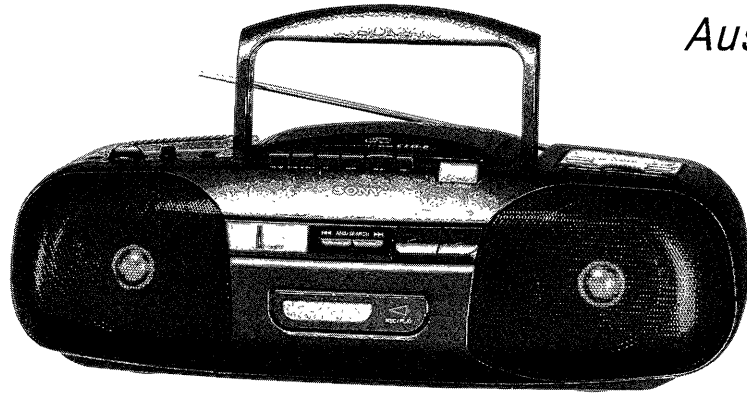


Photo : CFD-8

Model Name Using Similar Mechanism	CD Section	NEW
	Tape Section	CFS-200
Optical Device Type		HPC-1C
Tape Transport Mechanism Type		MF-CFD-8

SPECIFICATIONS

CD player section

System: Compact disc digital audio system
Laser diode properties: Material: GaAlAs
Wave length: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 μW
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block.)
Spindle speed: 200 r/min (rpm) to 500 r/min (rpm) (CLV)
Error correction: Sony Refined Super Strategy
Cross Interleave Reed Solomon Code
Number of channels: 2
Frequency response: 20–20,000 Hz + 1.0/–2.5 dB
Wow and flutter: Below measurable limit

Radio section

Frequency range

Model	FM	AM
AEP, UK, German	87.6 - 107MHz	531 - 1,602kHz
Italian	87.5 - 108MHz	526.5 - 1,606.5kHz
Australian, Central & South America	87.6 - 108MHz	530 - 1,710kHz
Saudi Arabia	87.6 - 107MHz	530 - 1,605kHz
E, Taiwan	87.6 - 108MHz	
East European	65 - 108MHz	531 - 1,602kHz

IF: FM: 10.7 MHz
AM: 455 kHz
Aerials: FM: Telescopic aerial
AM: Built-in ferrite bar aerial

Cassette-corder section

Recording system: 4-track 2-channel stereo
Frequency response: TYPE I (normal) cassette:
70–10,000 Hz

General

Speaker: Full range: 10 cm dia., 3.2 ohms cone type
Outputs: Headphones jack (stereo minijack):
For 16–68 ohms impedance headphones
Maximum power: 2.3 W + 2.3 W
Power requirements
AEP, East European, Italian, German model : 220 - 230V AC, 50Hz
UK, Australian model : 240V AC, 50Hz
Central & South America, taiwan model : 120V AC, 60Hz
E, Saudi Arabia model : 110 - 120V
220 - 240V AC, 50/60Hz selectable
DC 9 V, 6 R20 (size D) batteries
Power consumption: 20 W

— Continued on page 2 —

CD RADIO CASSETTE-CORDER

SONY®

Battery life

	FM recording	Tape playback	CD playback
Sony SUM-1 (NS)	approx. 13.5 h	approx. 7.5 h	approx. 2.5 h
Sony Alkaline AM1	approx. 19 h	approx. 12 h	approx. 4.5 h

Dimensions	Approx. 500 x 156 x 243 mm (w/h/d) incl. projecting parts
Mass	4.1 kg (incl. batteries)
Supplied accessory	Mains lead (1)

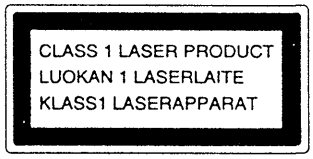
Design and specifications subject to change without notice.

Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

For customers in Europe and Saudi Arabia



This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

TABLE OF CONTENTS

Section *Title* *Page*

Specifications ····· 1

1. SERVICING NOTES ····· 3

2. GENERAL
Location and Function of Controls ····· 4

3. DISASSEMBLY
3-1. Cabinet (Front) Removal ····· 5
3-2. Tuner Dial, Tuner Board Removal ····· 5
3-3. Mechanism Deck, Main Board Removal ····· 6
3-4. CD Cabinet, Cabinet (Rear) Removal ····· 6
3-5. Magnet, Chucking Plate Removal ····· 7

4. DIAL POINTER INSTALLATION ····· 7

5. ADJUSTMENTS
5-1. Mechanical Adjustments ····· 8
5-2. Electrical Adjustments ····· 8

6. DIAGRAMS
6-1. Circuit Boards Location ····· 14
6-2. Printed Wiring Boards ····· 16
6-3. Schematic Diagram (Tuner/Tape/Power Section) ····· 21
6-4. Schematic Diagram (CD Section) ····· 25

7. EXPLODED VIEWS
7-1. Cabinet (Front) Section ····· 29
7-2. Cabinet (Rear) Section ····· 30
7-3. CD Section ····· 31
7-4. Mechanism Deck Section (1) ····· 32
7-5. Mechanism Deck Section (2) ····· 33

8. ELECTRICAL PARTS LIST ····· 34

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic bthereakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic brakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

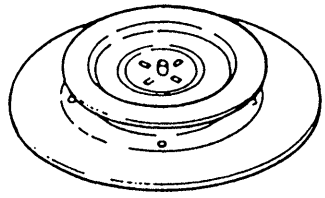
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 25 cm away from the objective lens.

CHUCK PLATE JIG ON REPAIRING

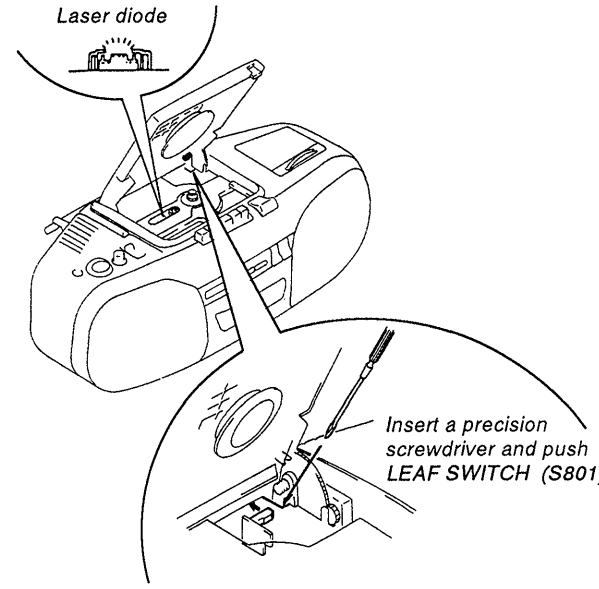
On repairing CD section, playing a disc without the CD lid, use Chuck Plate Jig.

- Code number of Chuck Plate Jig: X-4918-255-1



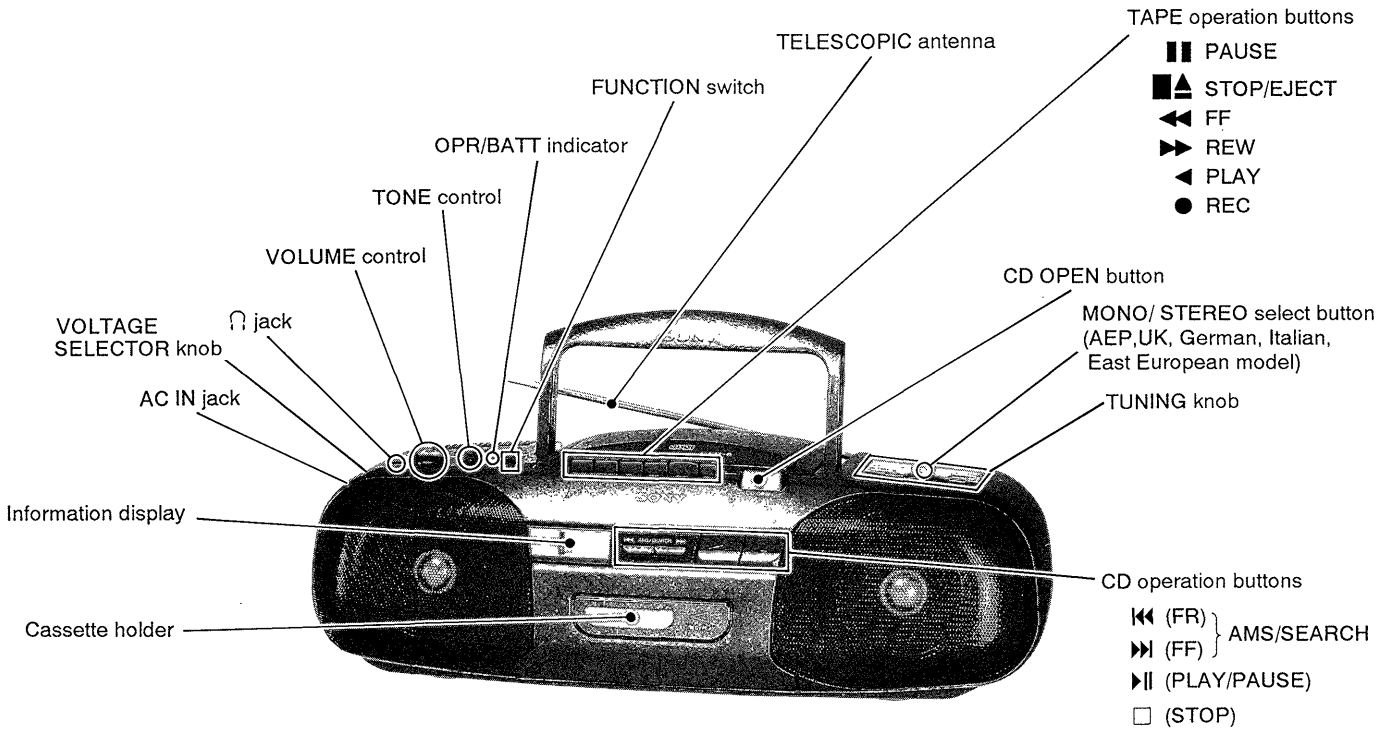
LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Press CD open knob.
2. Open the lid for CD.
3. Push on LEAF SWITCH (S801) as following figure.
4. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
   Objective lens moves up and down once for the focus search.



SECTION 2
GENERAL

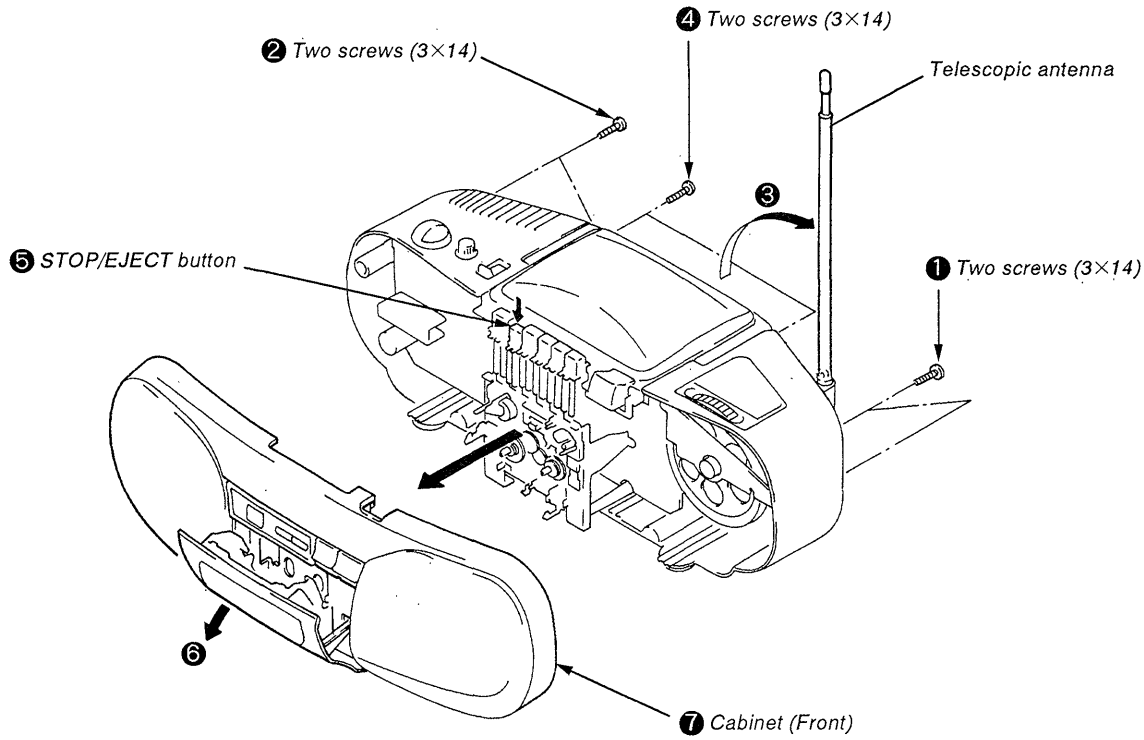
LOCATION AND FUNCTION OF CONTROLS



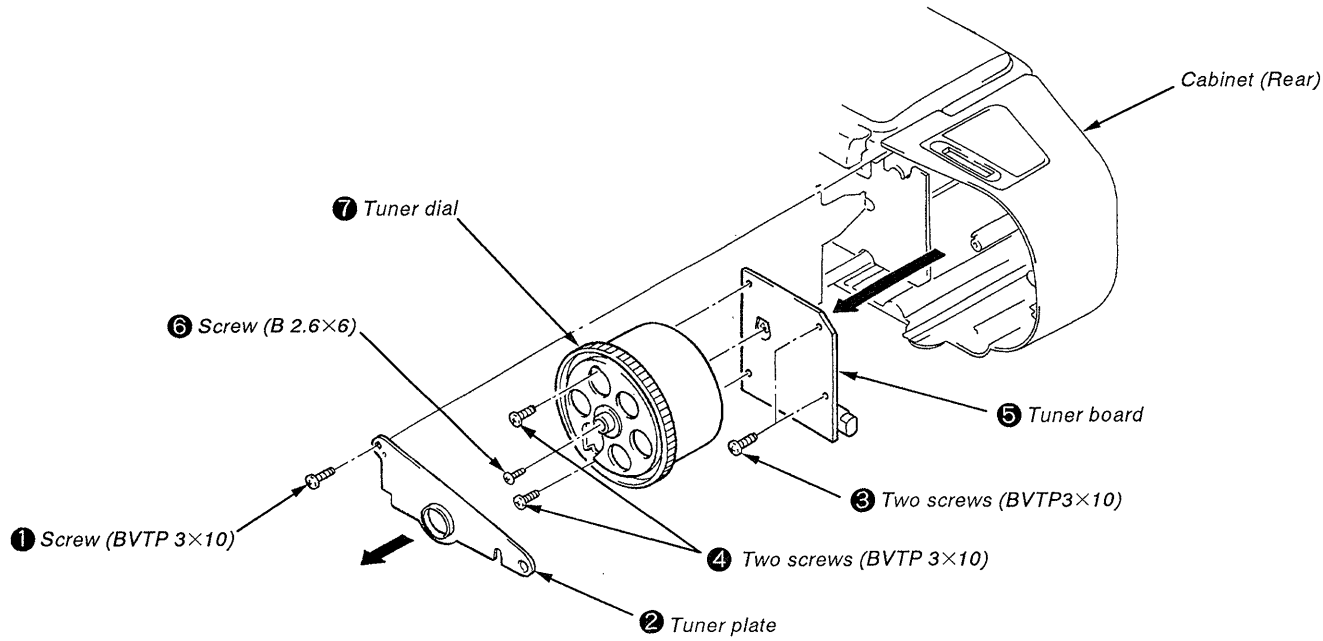
SECTION 3
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

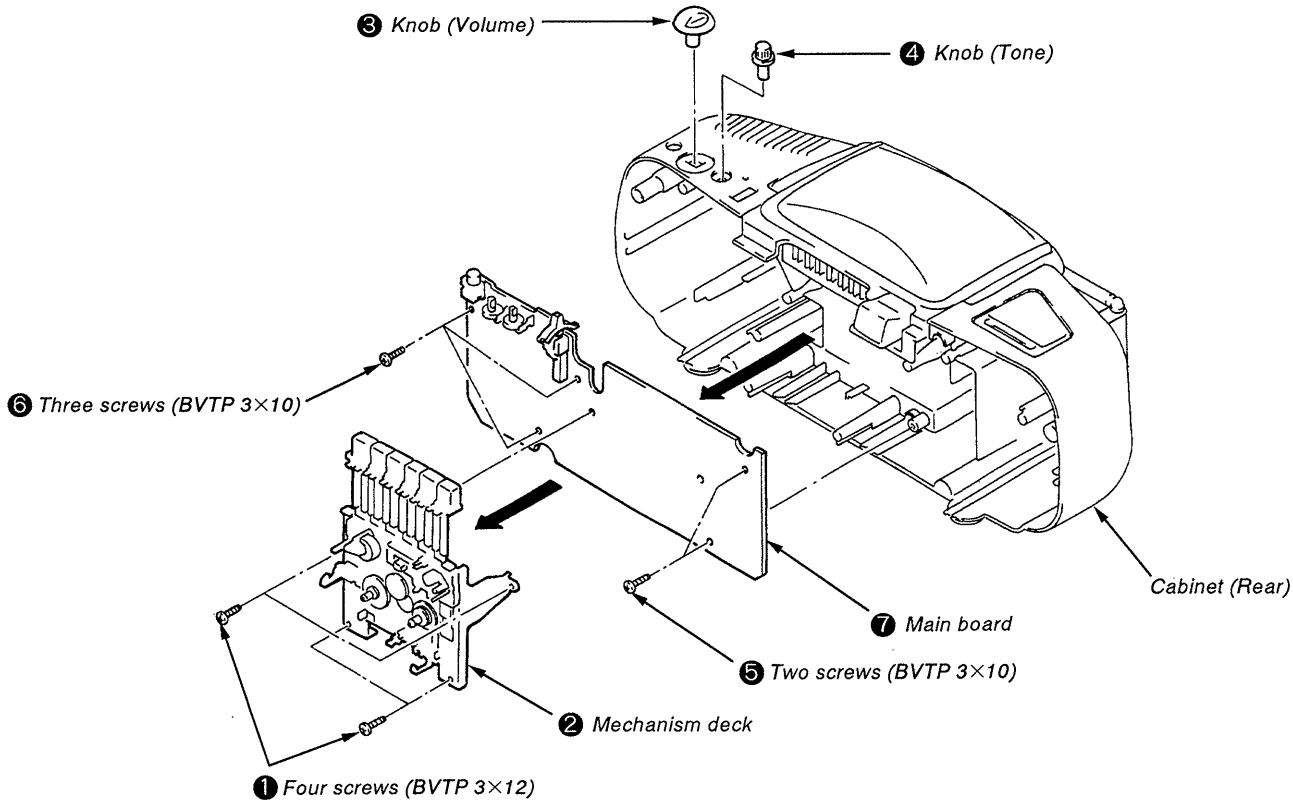
3-1. CABINET (FRONT) REMOVAL



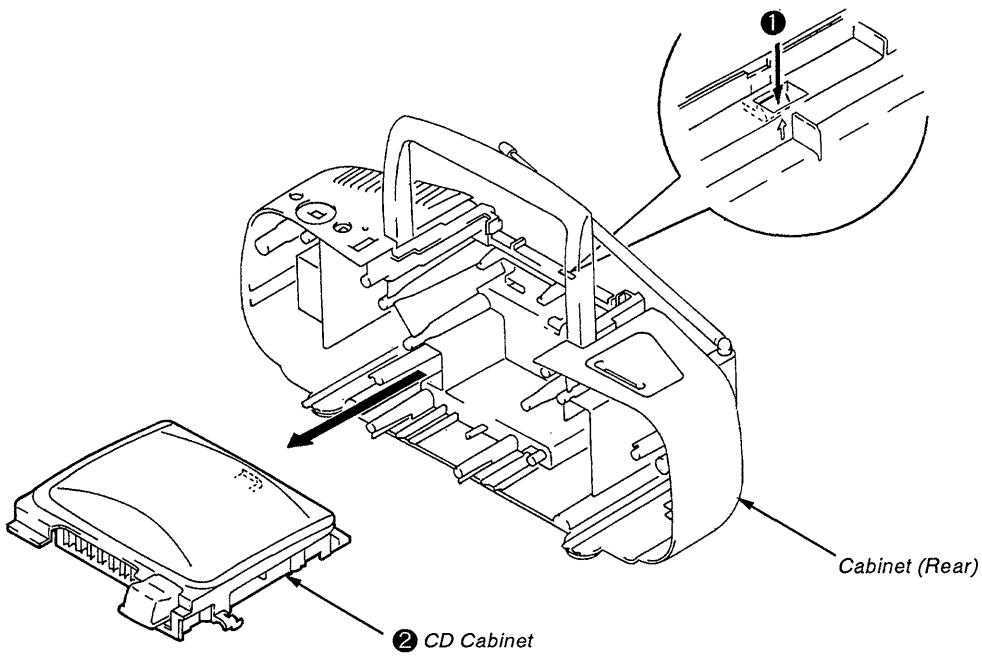
3-2. TUNER DIAL, TUNER BOARD REMOVAL



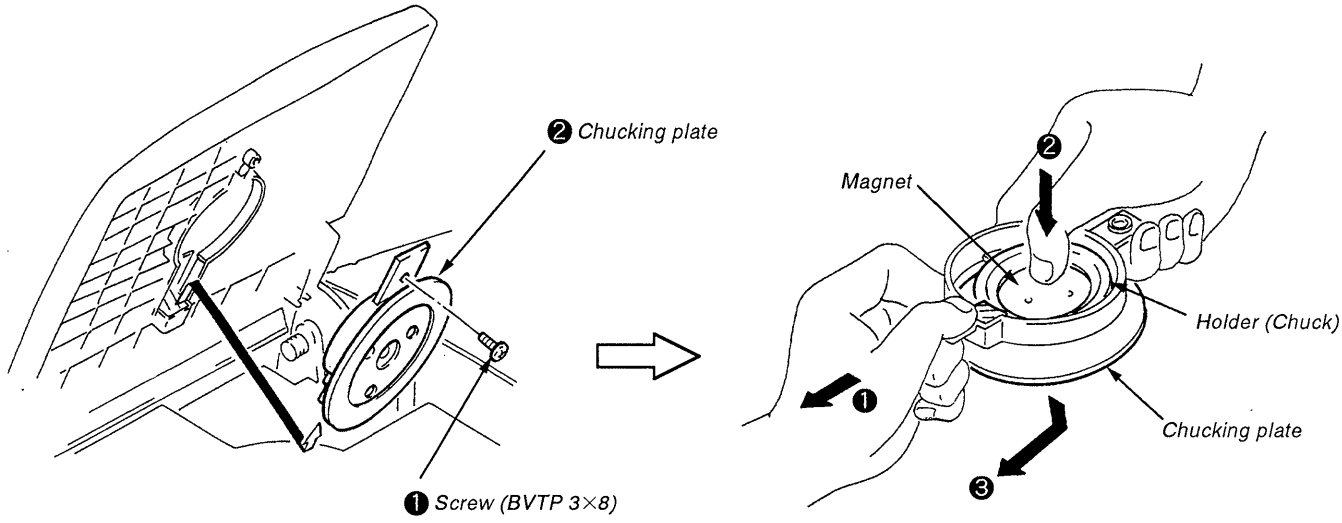
3-3. MECHANISM DECK, MAIN BOARD REMOVAL



3-4. CD CABINET, CABINET (REAR) REMOVAL



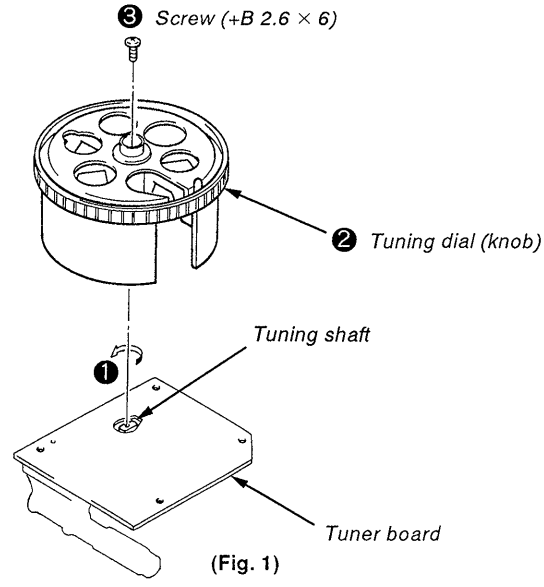
3-5. MAGNET, CHUCKING PLATE REMOVAL



SECTION 4
DIAL POINTER INSTALLATION

Note : Follow the installation procedure in the numerical order given.

1. Turn tuning shaft fully to arrow direction.
2. Fit tuning shaft to hole of tuning dial (knob) and then install it. (Fig.1)



(Fig. 1)

SECTION 5
ADJUSTMENTS

5-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab :
   record/playback head　　pinch roller
   erase head　　rubber belts
   capstan　　idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque Meter	Meter Reading
Forward	CQ-102C	30 – 70g•cm (0.42 – 0.97 oz•inch)
Forward back tension	CQ-102C	1.5 – 5.5g•cm (0.020 – 0.076 oz•inch)
Fast Forward	CQ-201B	more than 60g•cm (more than 0.84 oz•inch)
Rewind	CQ-201B	more than 60g•cm (more than 0.84 oz•inch)

Tape Tension Measurement

Torque Meter	Meter Reading
CQ-403A	more than 100g (more than 3.53 oz)

5-2. ELECTRICAL ADJUSTMENTS

TAPE RECORDER SECTION

Standard Output Level

Output terminal	HP OUT
load impedance	32 Ω
output signal level	0.25V (– 10dB)

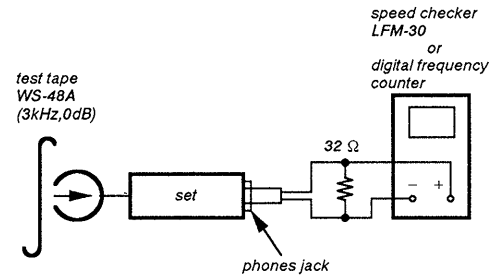
Test Tape

Type	Signal	Used for
WS-48A	3kHz, 0dB	Tape Speed Adjustment
P-4-A063	6.3kHz, – 10dB	Head azimuth Adjustment

Tape Speed Adjustment

Procedure :

Mode : playback

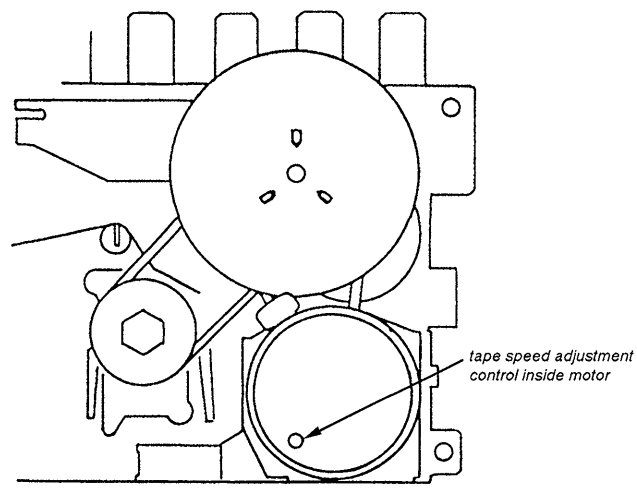


Adjustment Value :

Speed checker	Digital frequency counter
– 1 to +1%	2,970 – 3,030 Hz

Frequency difference between the beginning and the end of the tape should be within 1.5%(45Hz) .

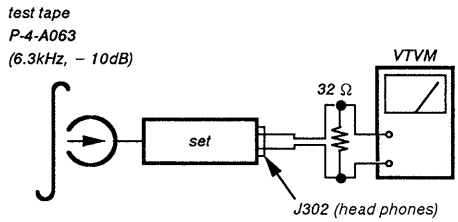
Adjustment Location :



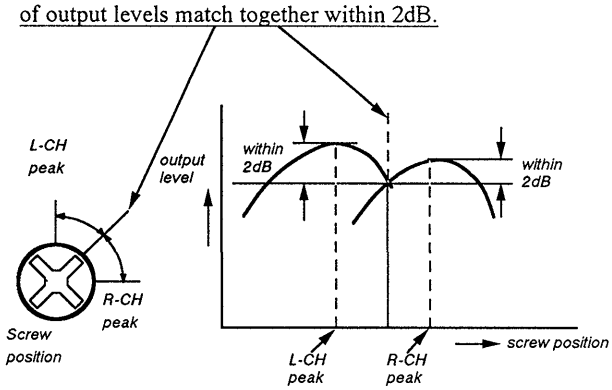
Record/Playback Head Azimuth Adjustment

Procedure :

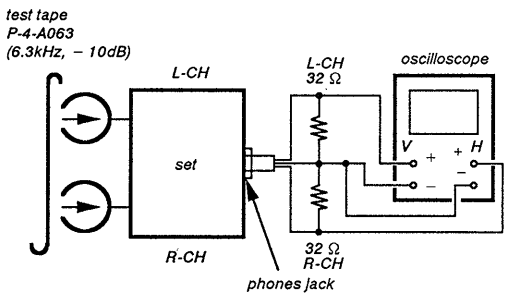
1. Mode : playback

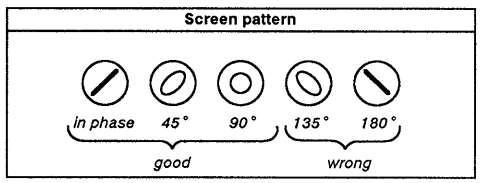


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 2dB.

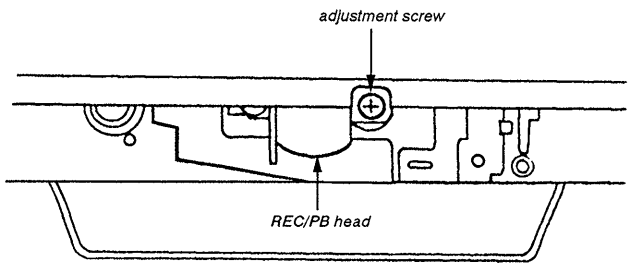


3. Phase Check
   Mode : playback





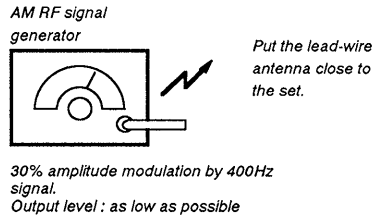
Adjustment Location : – record/playback head –



TUNER SECTION

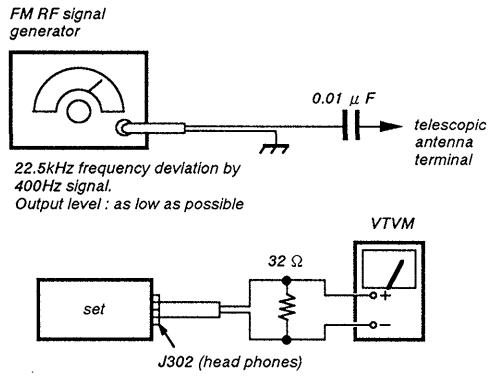
AM Section

Function switch : AM
Volume : MIN



FM Section

Function switch : FM
Volume : MIN



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

no mark	: AEP, UK, German model
( )	: Central & South America model
(( ))	: Italian model
< >	: East European model
<< >>	: E, Australian, Taiwan model
[ ]	: Saudi Arabia model

AM IF ALIGNMENT			
Adjust for a maximum reading on VTVM.			
CFT1	455kHz	(455kHz)	((455kHz))
	< 455kHz >	≪ 455kHz ≫	[455kHz]

AM FREQUENCY COVERAGE ADJUSTMENT			
Adjust for a maximum reading on VTVM.			
L4	520kHz	(520kHz)	((516kHz))
	< 520kHz >	≪ 520kHz ≫	[520kHz]
CT4	1,680kHz	(1,780kHz)	((1,630kHz))
	< 1,680kHz >	≪ 1,680kHz ≫	[1,680kHz]

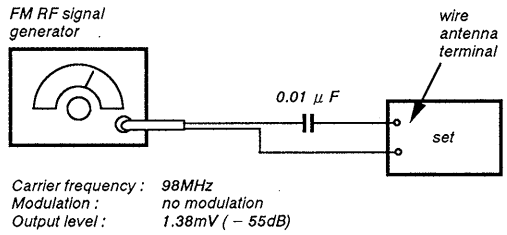
AM TRACKING ADJUSTMENT			
Adjust for a maximum reading on VTVM.			
L3	620kHz	(620kHz)	((620kHz))
	< 620kHz >	≪ 620kHz ≫	[620kHz]
CT3	1,400kHz	(1,400kHz)	((1,400kHz))
	< 1,400kHz >	≪ 1,400kHz ≫	[1,400kHz]

FM FREQUENCY COVERAGE ADJUSTMENT			
Adjust for a maximum reading on VTVM.			
L2	87.0MHz	(86.5MHz)	((87.35MHz))
	< 64.0MHz >	≪ 86.5MHz ≫	[87.35MHz]
CT2	108.3MHz	(109.5MHz)	((108.25MHz))
	< 109.5MHz >	≪ 109.5MHz ≫	[107.8MHz]

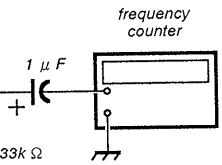
FM TRACKING ADJUSTMENT			
Adjust for a maximum reading on VTVM.			
Confirm	92.0MHz	(92.0MHz)	((92.0MHz))
	< 68.0MHz >	≪ 92.0MHz ≫	[92.0MHz]
CT1	104.0MHz	(104.0MHz)	((104.0MHz))
	< 102.0MHz >	≪ 104.0MHz ≫	[104.0MHz]

VCO Adjustment

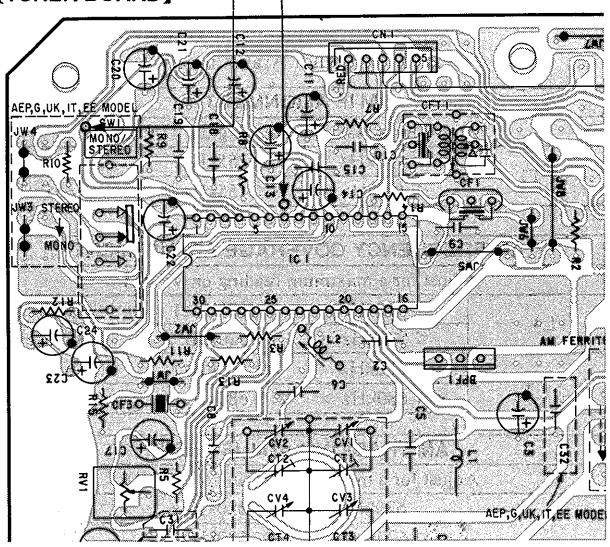
Procedure :



1. Connect the frequency counter to ④ and ⑦ pins of IC1 as shown the figure below.
2. Turn the set to 98MHz.
3. Adjust RV1 for 76kHz ± 500Hz reading on frequency counter.



【TUNER BOARD】



CD SECTION

Note on Adjustment

1. Perform adjustment in test mode.
   After adjustment, be sure to release test mode.
2. Perform adjustments in the order given.
3. Use the disc (YEDS-18. Part No. 3-702-101-01) only when so indicated.

Before adjustment

Put the set into test mode and perform the following checks. Repair if there are any problems.

- **Sled Motor Check**

1. press ▶|| key, then press OFF button.
2. Press ▶▶| , |◀◀ keys and confirm that the Optical pick-up moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises. (Cancellation of BTL mute)
   ▶▶| : Optical pick-up moves to the outer circumference
   |◀◀ : Optical pick-up moves to the inner circumference

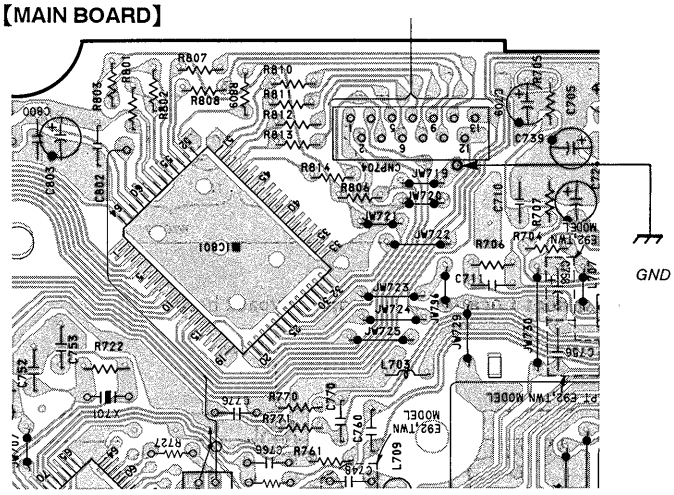
- **Focus Search Check**

1. Press ▶|| key. (Focus search operation is performed continuously.)
2. Look at the Optical pick-up objective lens and confirm that it moves up and down smoothly, with no catching or abnormal noises.
3. Press □ button.
   Confirm that focus search operation stops. If it does not , press □ button again longer.
   Note : When the malfunction is occurred by mis-passing other keys, turn off the power and check again from making the test mode.

How to Put the Set into Test Mode

1. Short-circuit following portion (IC801 ㉔ pin) on the MAIN board.
2. Turn the POWER on.
3. Open the short-circuit to release test mode.

【MAIN BOARD】



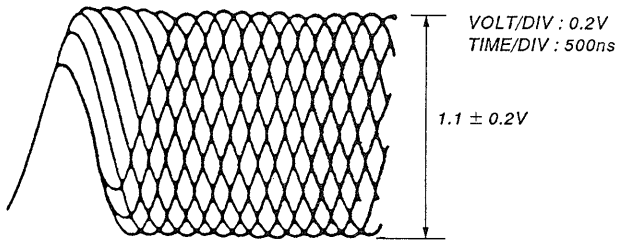
Focus Bias Adjustment

This adjustment is to be done when the optical block is replaced.

Adjustment procedure :

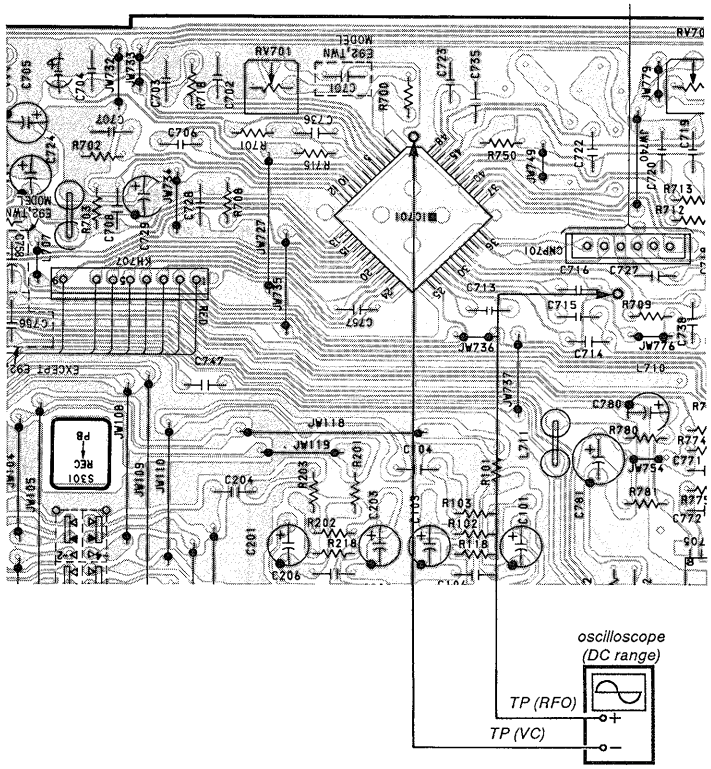
1. Connect oscilloscope to test point TP (VC) and TP (RFO) on main board.
2. Put the set into test mode.
3. Optical pic-up setting to the center by ⏭ or ⏮ button pushing.
4. Put disc (YEDS-18) in and press the ⏯ button.
5. Press the ⏯ button.(Tracking servo ON)
6. Adjust RV702 so that the oscilloscope waveform is as shown in the figure below (eye pattern).
   A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.
7. Release test mode after adjustment is completed.

- RF signal reference waveform (eye pattern)



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

【MAIN BOARD】



Focus/Tracking Gain Adjustment

A frequency responce analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

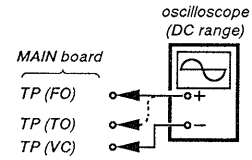
- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

Symptoms \ Gain	Focus	Tracking
● The time until music starts becomes longer for STOP → ▷ PLAY or automatic selection. (⏮, ⏭ buttons pressed.) (Normally takes about 2 seconds.).	low	low or high
● Music does not start and disc continues to rotate for STOP →▷ PLAY or automatic selection. (⏮, ⏭ buttons pressed.)	–	low
● Sound is interrupted during PLAY. Or time counter display stops progressing.	–	low
● More noise during 2-axis device operation.	high	high

The following is a simple adjustment method.

– Primary Adjustment –

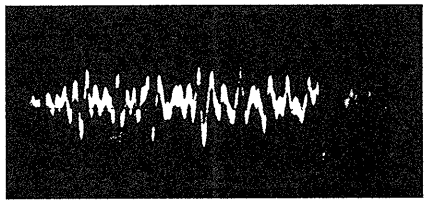
Note : Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment.If the positions after the primary adjustment are only a little different, return the controls to the original position.



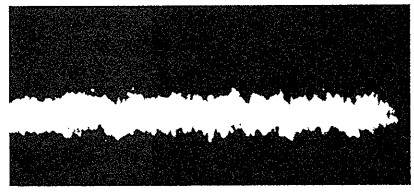
Procedure :

1. Keep the set horizontal.
   (If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Insert disc (YEDS-18) and press ⏯ button.
3. Connect oscilloscope to TP (FO) and TP (VC) on MAIN board.
4. Adjustment RV701 on digital board so that the waveform is as shown in the figure below. (focus gain adjustment)

VOLT/DIV : 100mV
TIME/DIV : 2mS



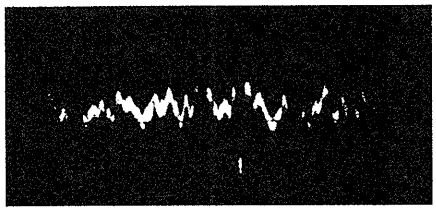
5. Connect oscilloscope to TP (TO) and TP (VC) on MAIN board.
6. Confirm that the waveform is as shown in the figure below.



● Incorrent Examples (DC level changes more than on adjusted waveform)

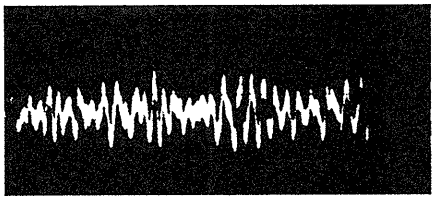
low focus gain

VOLT/DIV : 100mV
TIME/DIV : 2mS



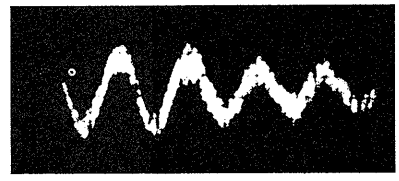
high focus gain

VOLT/DIV : 100mV
TIME/DIV : 2mS



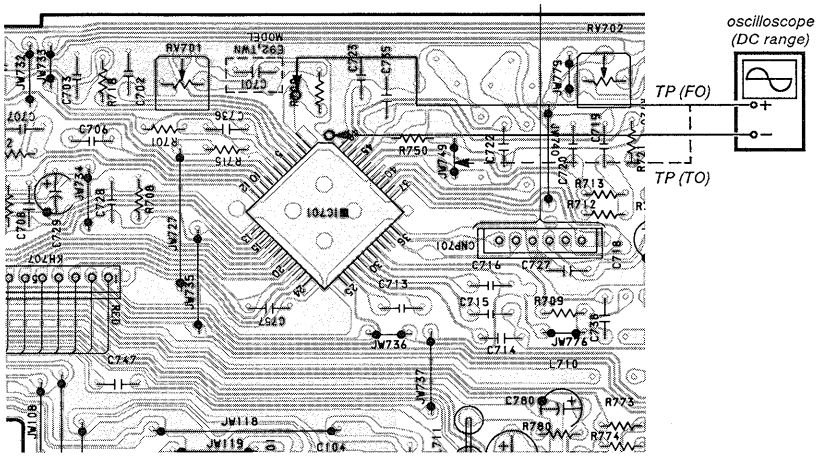
● Incorrect Examples (fundamential wave appears)

low tracking gain



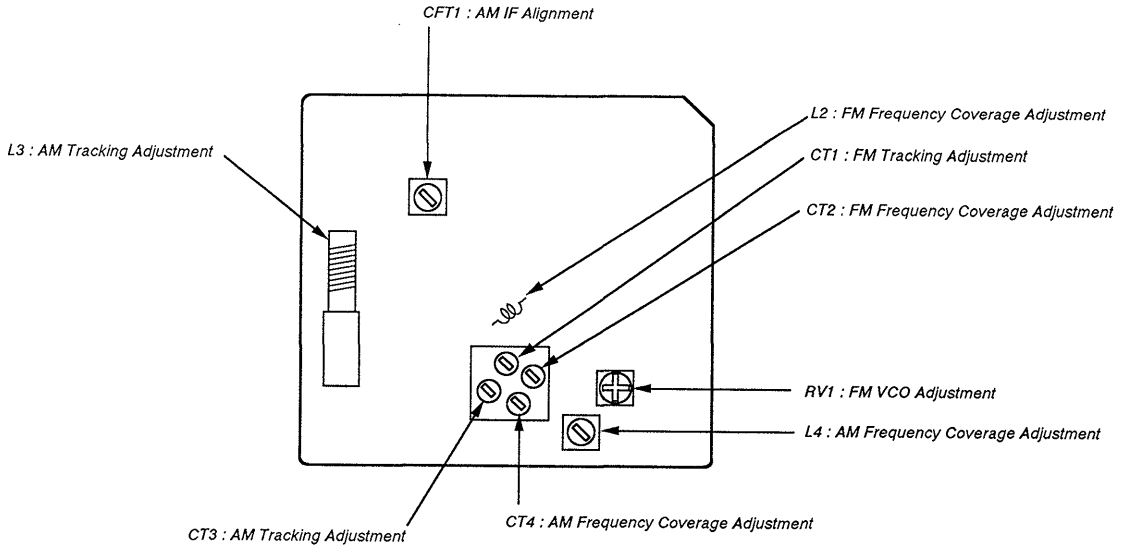
high tracking gain
(high fandamential wave than for low gain)

【MAIN BOARD】



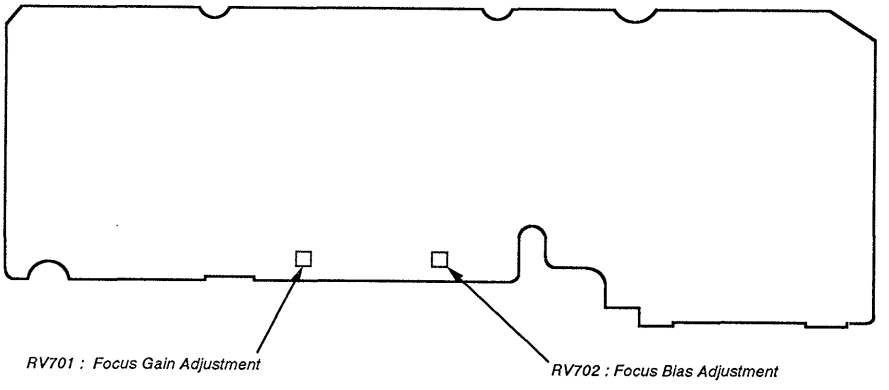
TUNER SECTION

Adjustment Location : Tuner board (Component side)


CFT1 : AM IF Alignment
L3 : AM Tracking Adjustment
L2 : FM Frequency Coverage Adjustment
CT1 : FM Tracking Adjustment
CT2 : FM Frequency Coverage Adjustment
RV1 : FM VCO Adjustment
L4 : AM Frequency Coverage Adjustment
CT3 : AM Tracking Adjustment
CT4 : AM Frequency Coverage Adjustment

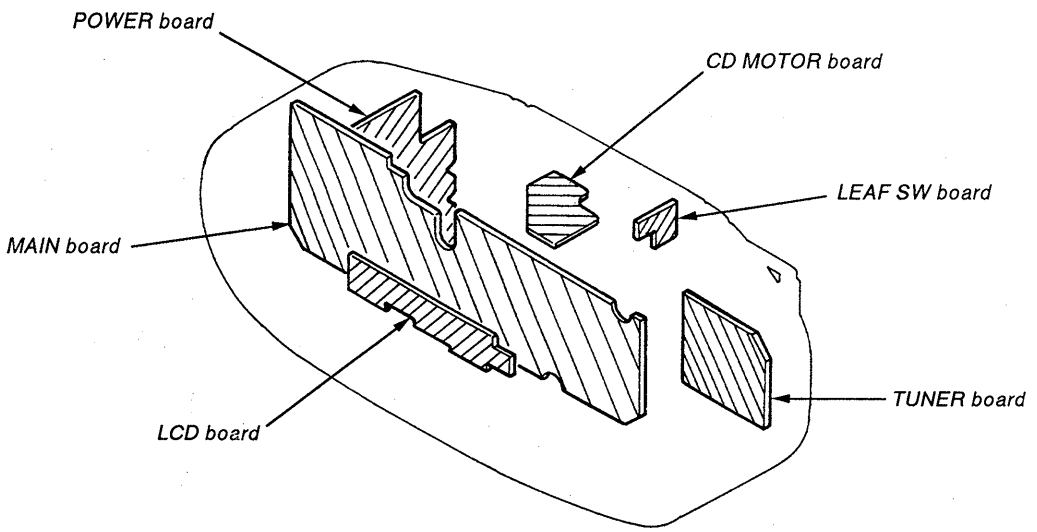
CD SECTION

Adjustment Location : Main board (Component side)



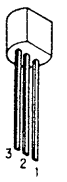
SECTION 6
DIAGRAMS

6-1. CIRCUIT BOARDS LOCATION

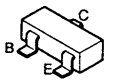


• SEMICONDUCTOR LEAD LAYOUTS

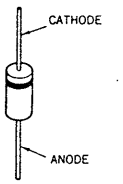
PST994D-T



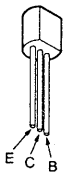
RN1201TPE4



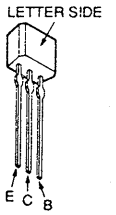
RD3.6ES-TPB2
RD5.6ES-TPB3
RD6.8ES-TPB3



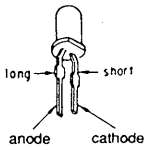
2SB1013-4
2SC945-P
2SC2001TP-K1K2



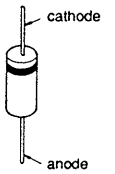
BA1A4P
BA1L3M-TP
2SA1175-HFE



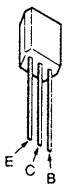
GL3PR8



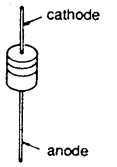
LT2A02
2A02



BA1L4L-TP
DTA114YS
DTC143ES
DTC143TS
DTC143XS
DTC144WS
RN1207
RN1209
RN1210
2SD2396



RD3.6ES-B2
RD5.6ES-B2
RD6.8ES-B2
1SS133



6-2. PRINTED WIRING BOARDS

● Refer to page 15 for Semiconductor Lead Layouts.

● SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D301	C - 13	Q1	D - 29
D302	C - 14	Q101	E - 15
D303	C - 14	Q201	E - 14
D305	C - 14	Q301	B - 23
D306	F - 15	Q302	B - 19
D307	C - 14	Q303	C - 14
D308	C - 14	Q304	C - 14
D309	C - 14	Q305	C - 13
D310	E - 15	Q306	C - 13
		Q307	B - 15
IC1	D - 27	Q308	D - 14
IC301	C - 20	Q701	F - 18
IC701	E - 20	Q702	E - 17
IC702	C - 24	Q703	E - 18
IC703	C - 13	Q705	E - 16
IC705	C - 18	Q760	E - 16
IC801	E - 23	Q770	E - 17
IC802	F - 25		

EXCPET E92, TWN model

Ref. No.	Location
D901	F - 4
D902	E - 4
D903	E - 4
D904	E - 4

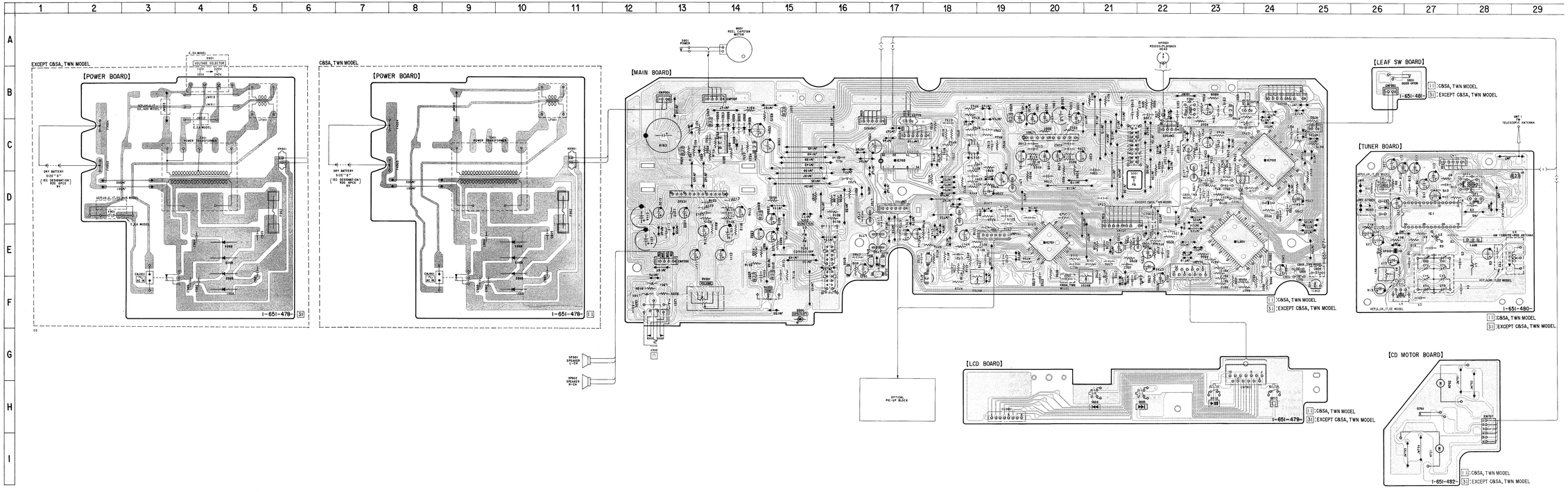
E92, TWN model

Ref. No.	Location
D901	F - 10
D902	E - 10
D903	E - 10
D904	E - 10

Note:

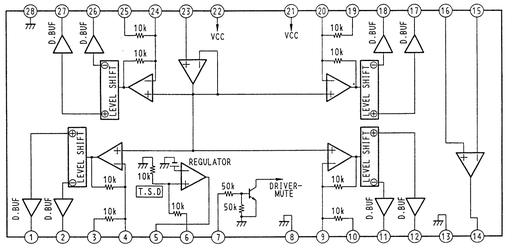
- ○— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ▒▒ : Pattern on the side which is seen.

- Abbreviations
  - G : German
  - IT : Italian
  - EE : East European
  - EA : Saudi Arabia
  - CASA : Central & South America
  - TWN : Taiwan



● IC BLOCK DIAGRAM

IC703 BA6296FP



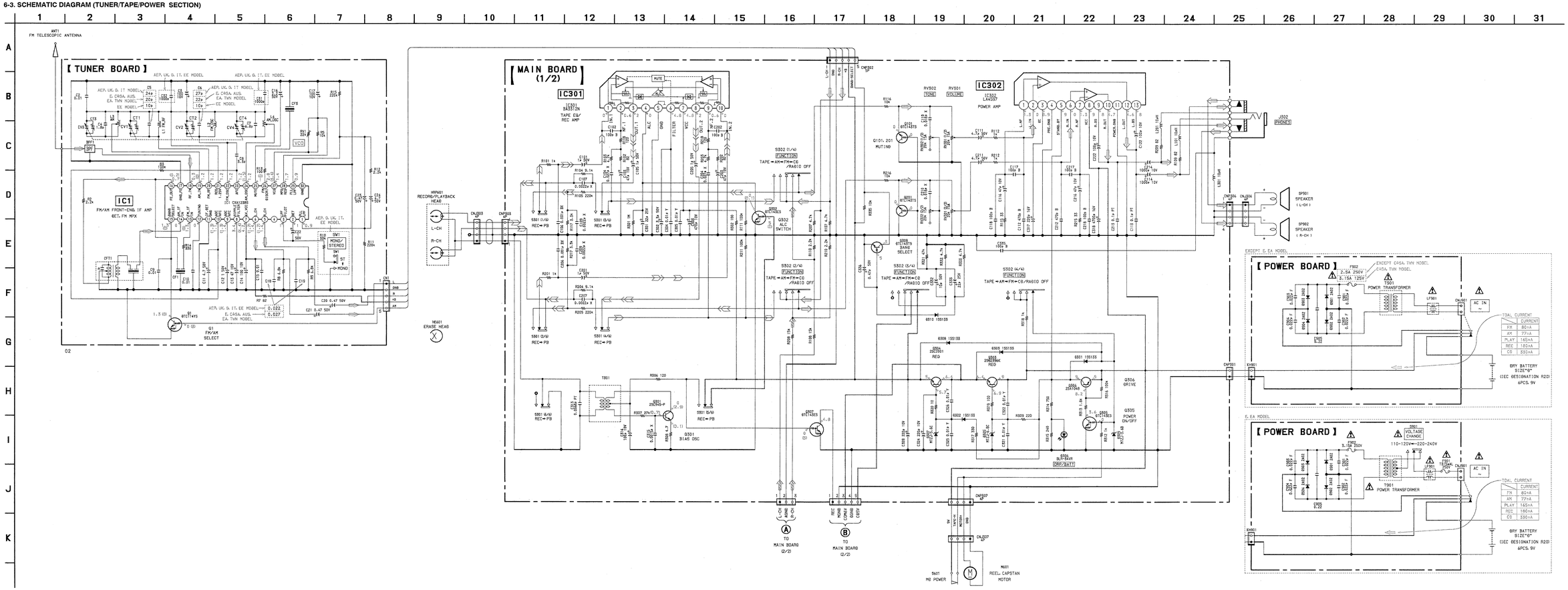
Note :

- All capacitors are in μ F unless otherwise noted. pF: μ μ F
  50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : Internal component.

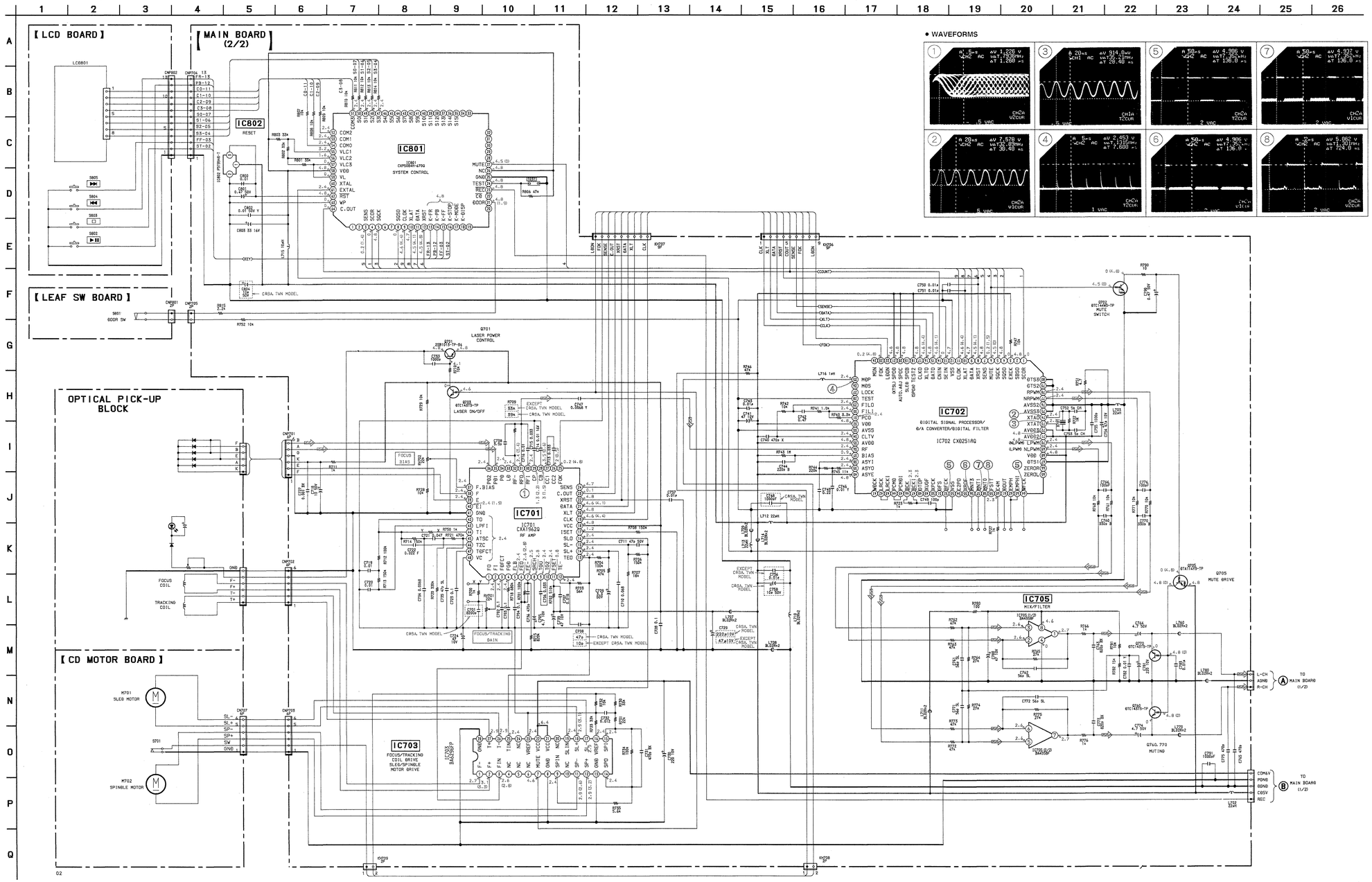
Note : The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

- ═══ : B+ Line
- [ ] : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM (RADIO SECTION)
  ( ) : AM (RADIO SECTION)
  no mark : PLAYBACK (AUDIO SECTION)
  ( ) : REC (AUDIO SECTION)
  no mark : STOP (CD SECTION)
  ( ) : PLAYBACK (CD SECTION)
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM ⇨ : PB ⇨ : CD
  ⇨ : REC
- Abbreviations
  G : German
  IT : Italian
  EE : East European
  EA : Saudi Arabia
  CASA : Central & South America
  TWN : Taiwan

6-3. SCHEMATIC DIAGRAM (TUNER/TAPE/POWER SECTION)



6-4. SCHEMATIC DIAGRAM (CD SECTION)



• WAVEFORMS

Note :

- All capacitors are in μ F unless otherwise noted. pF: μ μ F 50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and ¼W or less unless otherwise specified.

Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- ▪▪▪▪ : B+ Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM (RADIO SECTION)
  ( ) : AM (RADIO SECTION)
  no mark : PLAYBACK (AUDIO SECTION)
  ( ) : REC (AUDIO SECTION)
  no mark : STOP (CD SECTION)
  ( ) : PLAYBACK (CD SECTION)
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD
- Abbreviations
  CASA : Central & South America
  TWN : Taiwan

SECTION 7
EXPLODED VIEWS

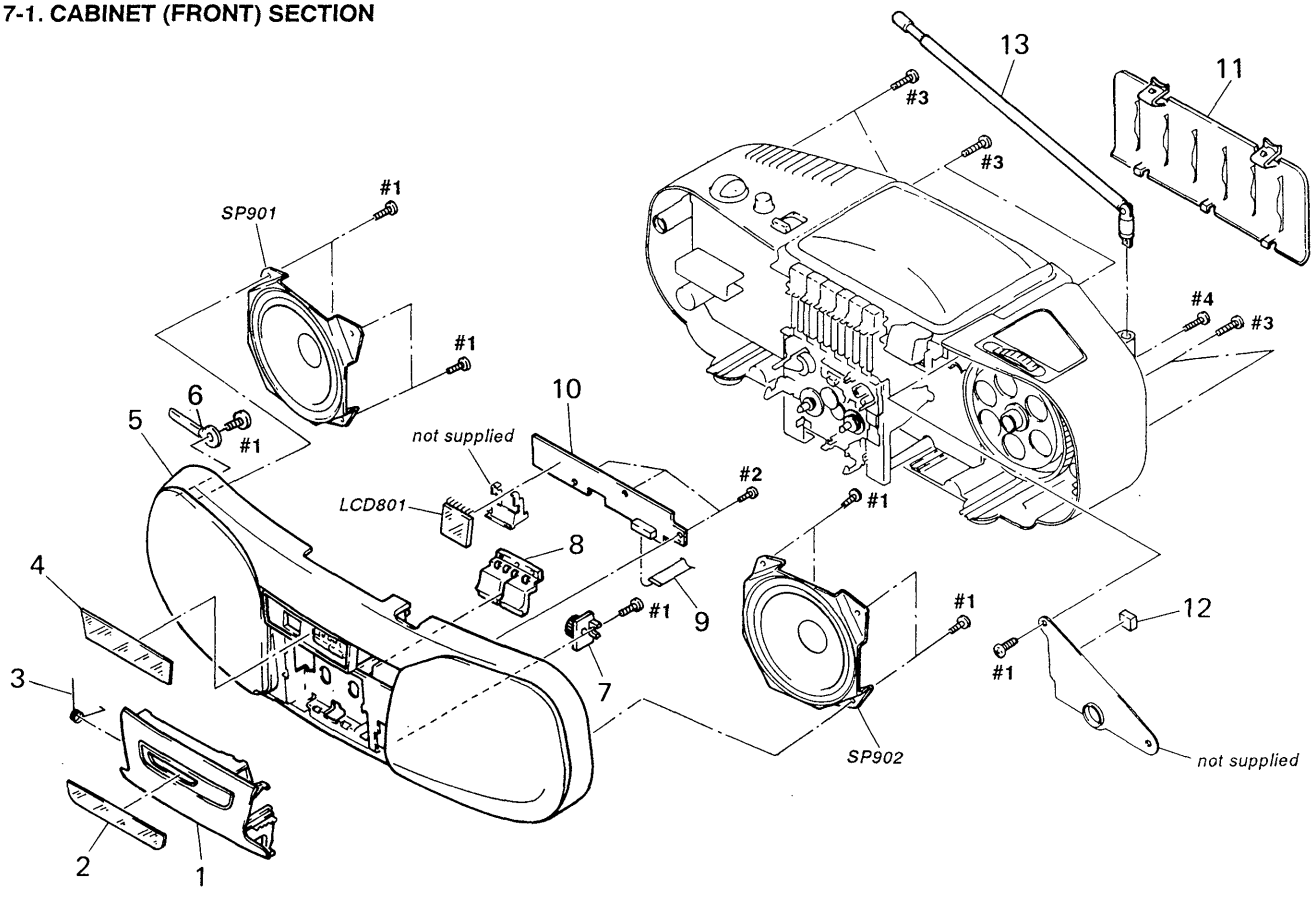
NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- Abbreviations
  - G : German
  - IT : Italian
  - EE : East European
  - EA : Saudi Arabia
  - C&SA: Central & South America
  - TWN : Taiwan

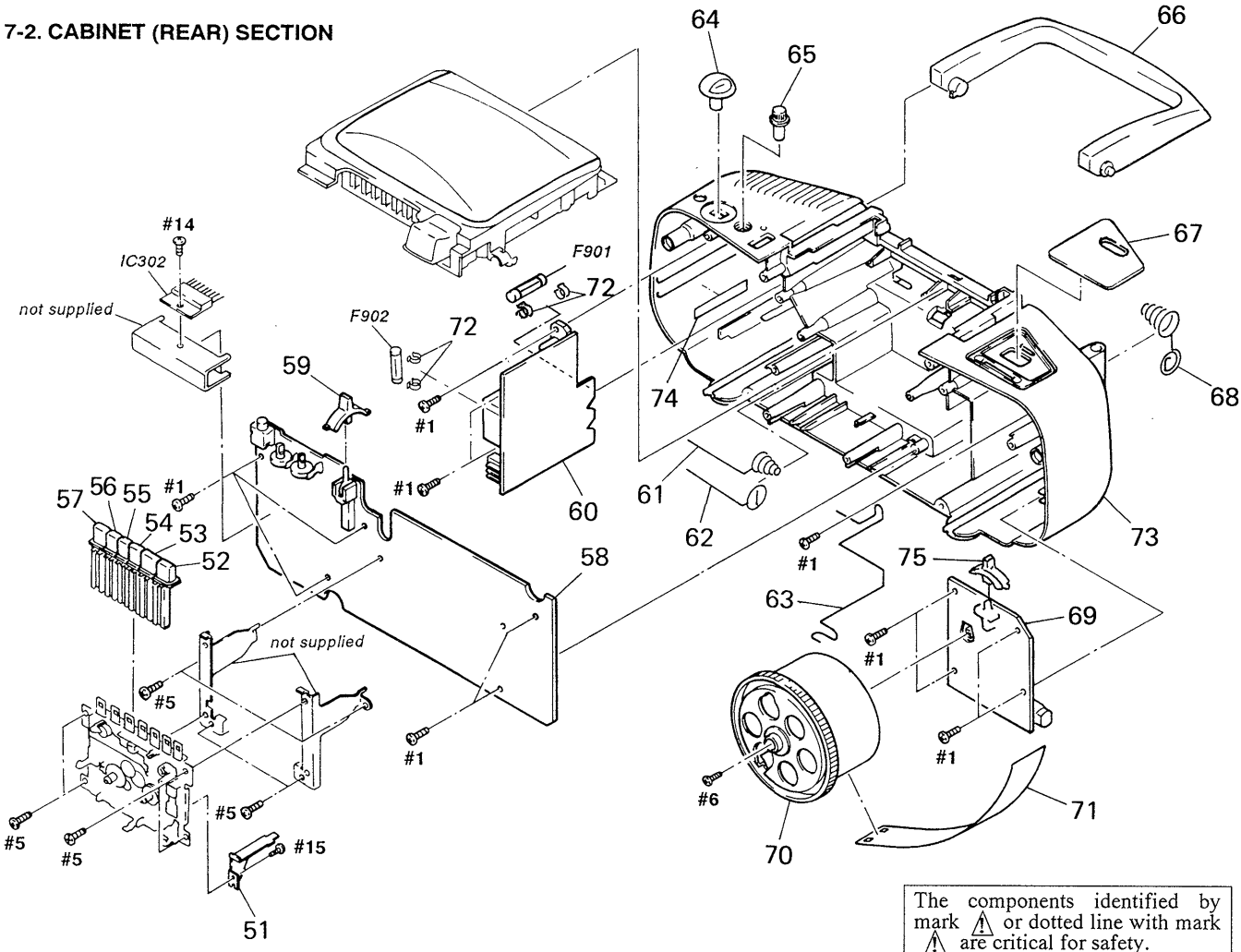
7-1. CABINET (FRONT) SECTION



Ref. No.	Part No.	Description	Remark
1	3-910-121-01	HOLDER, CASSETTE(CFD-8)	
1	3-912-507-01	HOLDER, CASSETTE(CFD-7)	
2	3-910-085-01	WINDOW, CASSETTE(CFD-8)	
2	3-912-506-01	WINDOW, CASSETTE(CFD-7)	
3	3-910-086-01	SPRING (CASSETTE)	
4	3-910-099-01	WINDOW, LCD	
5	X-3368-599-1	CABINET (FRONT) SUB ASSY	
6	3-703-150-11	STOPPER, WIRING	
7	3-351-377-01	DAMPER	
8	3-910-117-01	BUTTON, CD	
9	1-765-085-11	WIRE, PARALLEL (FFC) (13 CORE)	

Ref. No.	Part No.	Description	Remark
* 10	1-651-479-11	LCD BOARD(C&SA, TWN)	
* 10	1-651-479-31	LCD BOARD(EXCEPT C&SA, TWN)	
11	3-343-064-01	LID, BATTERY CASE(CFD-8:AEP, UK, G, IT, EE)	
11	3-915-535-01	LID, BATTERY CASE (CFD-8:E, C&SA, AUS, EA, TWN)	
11	3-915-535-11	LID, BATTERY CASE (CFD-7)	
12	3-913-348-01	FELT	
13	1-501-388-11	ANTENNA, TELESCOPIC	
LCD801	1-810-442-11	DISPLAY PANEL, LIQUID CRYSTAL	
SP901	1-504-505-21	SPEAKER (10CM)(L-CH)	
SP902	1-504-505-21	SPEAKER (10CM)(R-CH)	

7-2. CABINET (REAR) SECTION

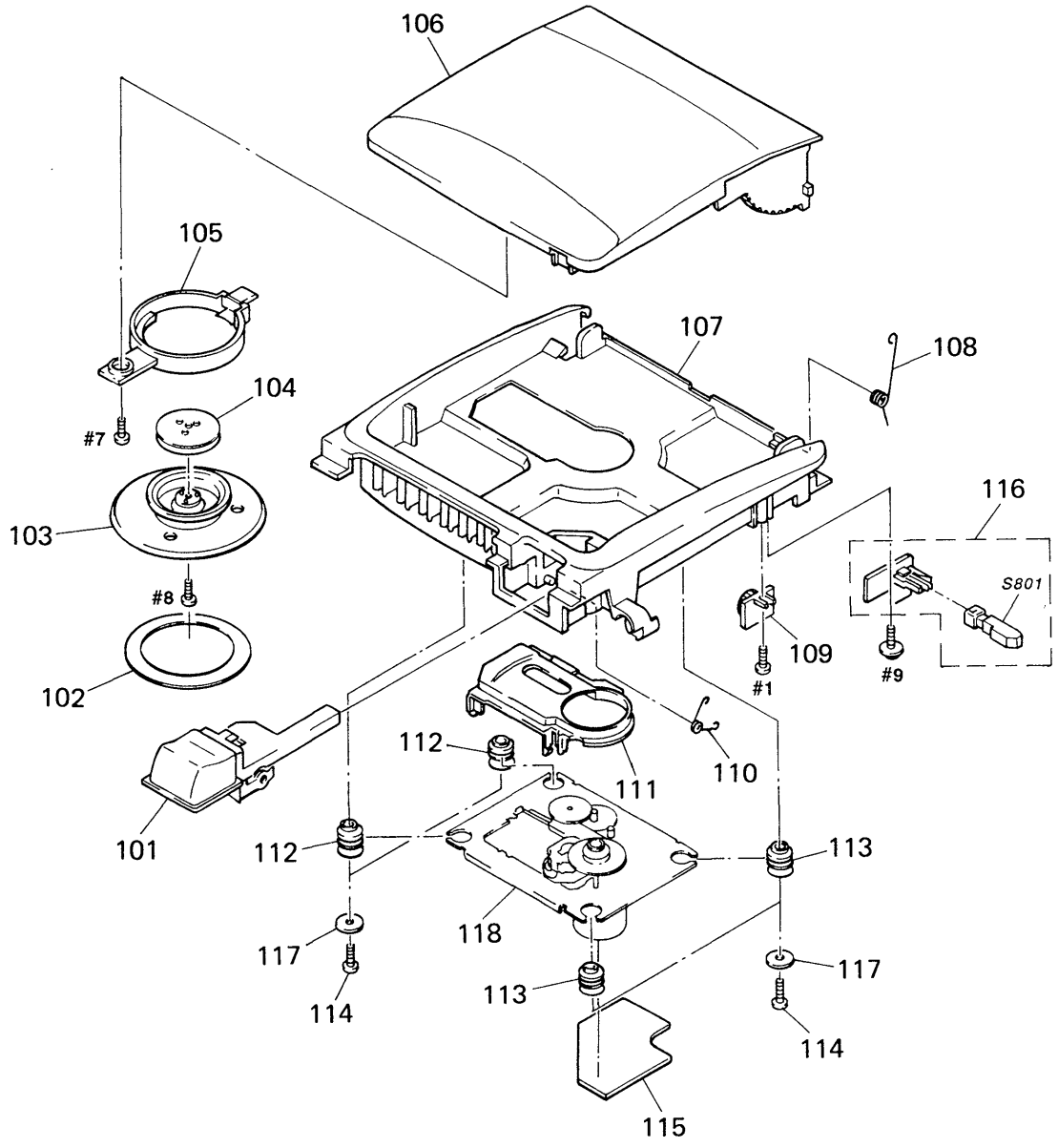


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
* 51	3-910-098-01	LEVER (REC)	
52	3-910-103-01	BUTTON (REC), MD	
53	3-910-106-01	BUTTON (PLAY), MD	
54	3-910-105-01	BUTTON (REW), MD	
55	3-910-104-01	BUTTON (FF), MD	
56	3-910-107-01	BUTTON (STOP), MD	
57	3-910-102-01	BUTTON (PAUSE), MD	
* 58	A-3269-486-A	MAIN BOARD, COMPLETE(C&SA, TWN)	
* 58	A-3276-381-A	MAIN BOARD, COMPLETE(EXCEPT C&SA, TWN)	
59	3-369-039-01	KNOB (FUNCTION)	
* 60	1-651-478-11	POWER BOARD (C&SA, TWN)	
* 60	1-651-478-31	POWER BOARD (EXCEPT C&SA, TWN)	
61	3-910-090-01	TERMINAL (-), BATTERY	
62	3-910-087-01	TERMINAL (+), BATTERY	
* 63	3-910-091-01	TERMINAL, ANTENNA	
64	3-910-115-01	KNOB (VOL)	
65	3-910-097-01	KNOB (TONE)	
66	X-3366-819-3	HANDLE ASSY	
67	3-910-100-01	WINDOW, TU(E, C&SA, AUS, EA, TWN)	
67	3-910-100-11	WINDOW, TU(AEP, UK, G, IT, EE)	
68	3-386-979-01	SPRING (+ -), BATTERY COIL	
* 69	A-3269-237-A	TUNER BOARD, COMPLETE(IT)	
* 69	A-3269-240-A	TUNER BOARD, COMPLETE(AEP, UK, G)	

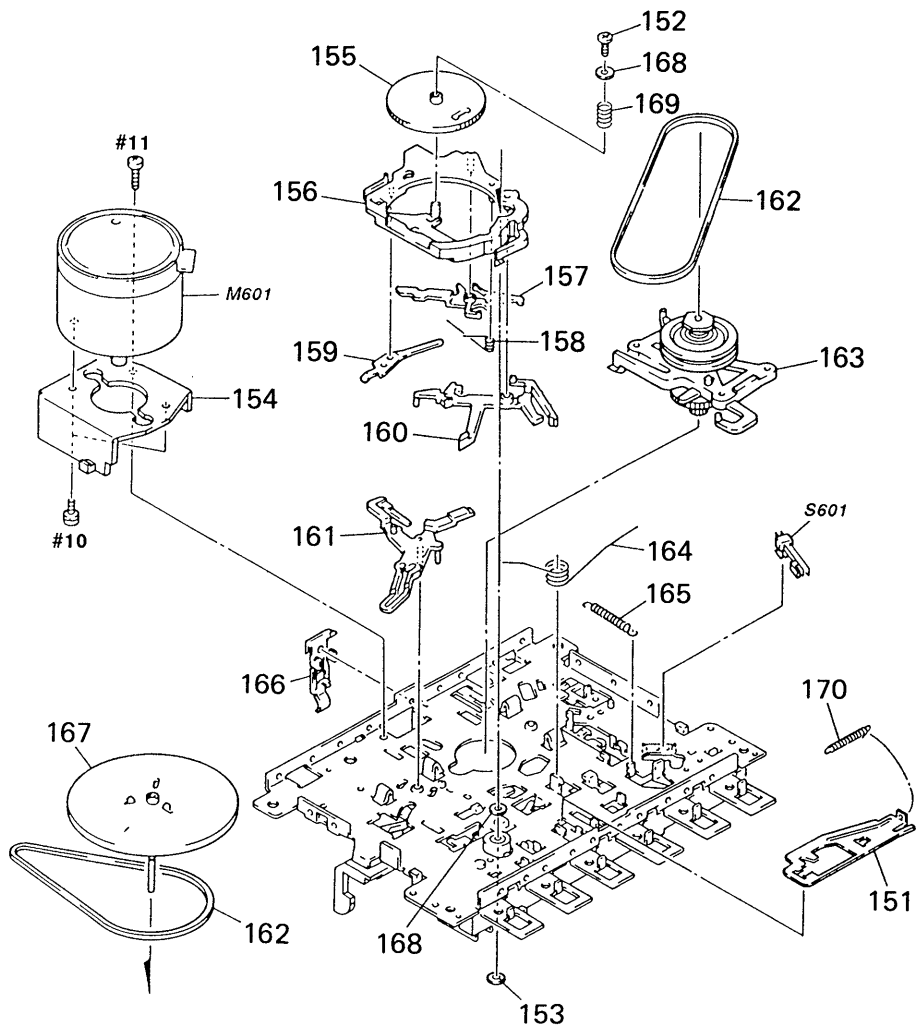
Ref. No.	Part No.	Description	Remark
* 69	A-3269-336-A	TUNER BOARD, COMPLETE(E, AUS)	
* 69	A-3269-339-A	TUNER BOARD, COMPLETE(C&SA, TWN)	
* 69	A-3269-356-A	TUNER BOARD, COMPLETE(EA)	
* 69	A-3269-393-A	TUNER BOARD, COMPLETE(EE)	
70	3-910-101-01	DIAL, TU	
71	3-912-776-11	SHEET, TU(AEP, UK, G)	
71	3-912-776-21	SHEET, TU(IT)	
71	3-912-776-31	SHEET, TU(E, C&SA, AUS, TWN)	
71	3-912-776-41	SHEET, TU(EA)	
71	3-912-776-61	SHEET, TU(EE)	
72	1-533-217-31	HOLDER, FUSE	
73	3-910-122-11	CABINET (REAR) (CFD-8:UK, C&SA, IT, AUS, TWN, EE)	
73	3-910-122-21	CABINET (REAR)(CFD-8:AEP)	
73	3-910-122-31	CABINET (REAR)(CFD-8:G)	
73	3-910-122-41	CABINET (REAR)(CFD-8:E, EA)	
73	3-910-122-71	CABINET (REAR)(CFD-7)	
74	3-831-441-XX	CUSHION, STOPPER(CFD-8)	
75	3-910-114-01	KNOB, MONO/ST(AEP, UK, G, IT, EE)	
⚠F901	1-532-235-00	FUSE(315mA 250V)(E, EA)	
⚠F902	1-532-286-00	FUSE(2.5A 250V)(EXCEPT C&SA, TWN)	
⚠F902	1-576-107-11	FUSE(3.15A 125V)(C&SA, TWN)	
IC302	8-759-820-22	IC LA4597	

7-3. CD SECTION



Ref. No.	Part No.	Description	Remark
101	3-910-108-01	BUTTON (CD) (EJECT)	
102	3-910-094-01	CUSHION (CHUCK)	
103	3-910-112-01	PLATE, CHUCKING	
104	1-452-732-11	MAGNET	
105	3-910-113-01	HOLDER (CHUCK)	
106	3-910-123-01	LID, CD(CFD-8)	
106	3-910-123-11	LID, CD(CFD-7)	
107	3-910-124-11	CABINET (CD)	
108	3-910-089-01	SPRING, CD UP	
109	3-351-377-01	DAMPER	
110	3-910-088-01	SPRING, CD EJECT RETURN	
111	3-910-116-01	COVER, CD	
112	3-910-095-11	RUBBER, VIBRATION PROOF	
113	3-910-095-01	RUBBER, VIBRATION PROOF	
114	3-910-096-01	SCREW (2.6X10), +PWH TAPPING	
* 115	1-651-482-11	CD MOTOR BOARD(C&SA, TWN)	
* 115	1-651-482-31	CD MOTOR BOARD(EXCEPT C&SA, TWN)	
* 116	1-651-481-11	LEAF BOARD(C&SA, TWN)	
* 116	1-651-481-31	LEAF BOARD(EXCEPT C&SA, TWN)	
117	3-831-441-11	CUSHION	
118	1-467-655-11	PICKUP UNIT, OPTICAL	
S801	1-571-936-11	SWITCH, LEAF(DOOR OPEN)	

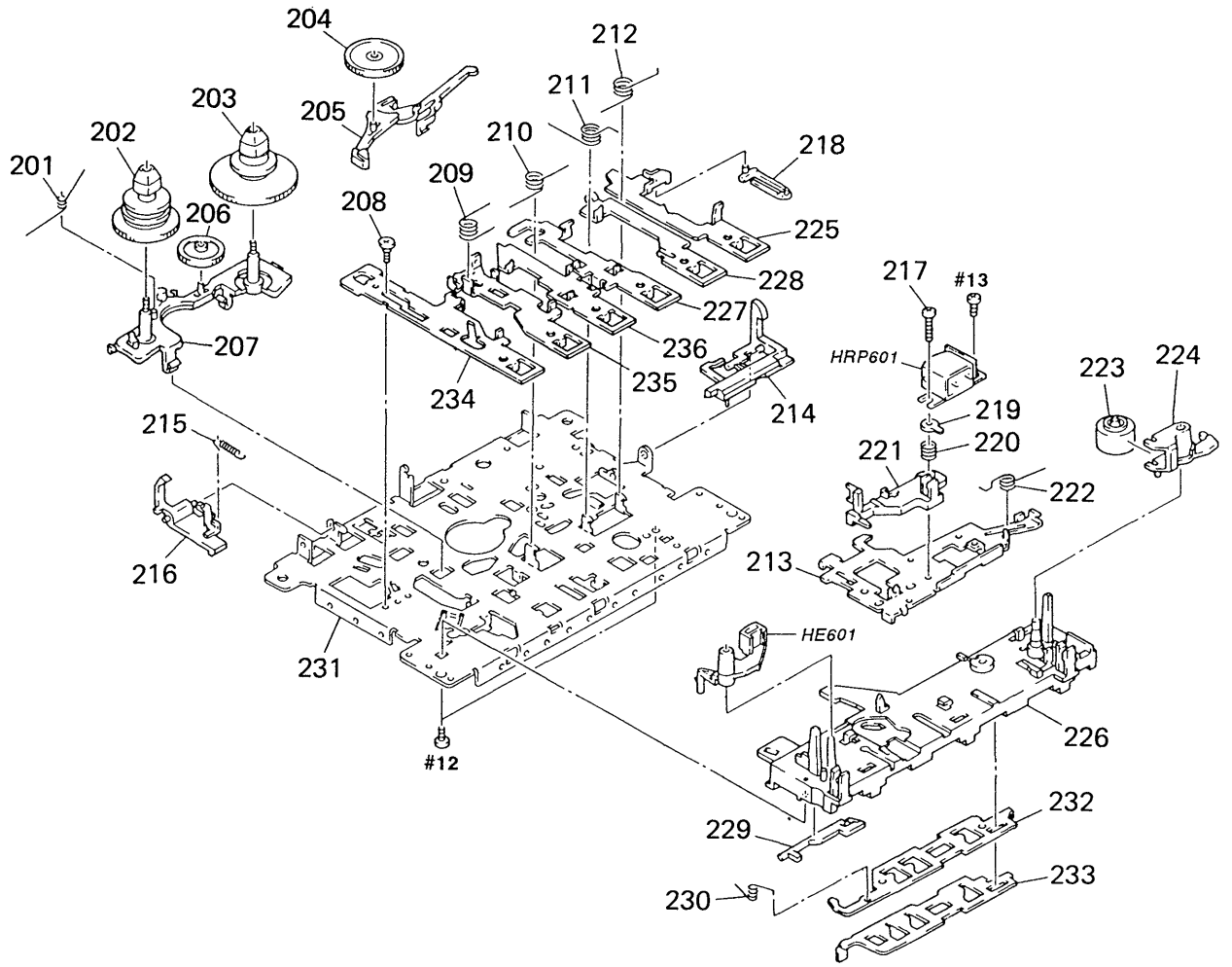
7-4. MECHANISM DECK SECTION (1)
(MF-CFD-8)



Ref. No.	Part No.	Description	Remark
151	3-379-844-01	PLATE, STOP, FR	
152	3-366-352-01	SCREW	
153	3-362-980-01	WASHER	
* 154	3-362-988-01	HOLDER, MOTOR	
155	3-362-974-01	GEAR, CAM	
156	3-362-973-01	AS (BASE)	
157	3-362-976-01	LEVER, CONTROL	
158	3-362-977-01	SPRING	
159	3-362-978-01	SPRING, PLATE	
160	3-362-975-01	LEVER, SENSOR	
161	3-387-697-01	SENSOR	

Ref. No.	Part No.	Description	Remark
162	3-362-989-01	BELT	
163	3-362-969-01	IDLER ASSY, PF	
164	3-362-970-01	SPRING	
165	3-362-971-01	SPRING	
166	3-911-189-01	CASSETTE SPRING	
167	3-387-698-01	FW ASSY	
168	3-369-961-01	WASHER	
169	3-369-962-01	SPRING, COMPRESSION	
170	3-379-843-01	SPRING	
M601	X-3366-491-1	MOTOR ASSY	
S601	1-572-304-11	SWITCH, LEAF(MD POWER)	

7-5. MECHANISM DECK SECTION (2)
(MF-CFD-8)



Ref. No.	Part No.	Description	Remark
201	3-372-120-01	SPRING	
202	X-3363-611-1	REEL, S	
203	3-362-962-01	REEL ASSY, T	
204	3-362-960-01	PULLEY, IDLER	
205	3-362-959-01	ARM, IDLER	
206	3-362-965-01	IDLER, FF	
207	3-362-961-01	SPINDLE (BASE)	
208	3-362-958-01	SCREW	
209	3-362-954-01	SPRING	
210	3-362-955-01	SPRING	
211	3-362-956-01	SPRING	
212	3-362-957-01	SPRING	
* 213	3-362-984-01	HEAD (BASE)	
214	3-362-968-01	LEVER, EJECT	
215	3-387-699-01	SPRING	
216	3-362-966-01	INTER LOCK	
217	3-363-229-01	SCREW	
218	3-362-953-01	ARM, PAUSE	
219	3-363-230-01	LUG	
220	3-362-985-01	SPRING	
221	3-362-986-01	HOLDER, HEAD	
222	3-362-983-01	SPRING	
223	3-362-982-01	PINCH ROLLER	
224	3-362-981-01	PINCH ARM	
* 225	3-362-952-01	LEVER, PAUSE	
226	3-362-942-01	FRAME ASSY	
* 227	3-362-950-01	LEVER, FF	
* 228	3-362-951-01	LEVER, SE	
229	3-362-944-01	STOPPER, REC	
230	3-362-945-01	SPRING	
* 231	3-362-941-01	CHASSIS	
* 232	3-362-943-01	PLATE, FUNCTION	
* 233	3-362-946-01	LEVER, SW	
* 234	3-362-947-01	LEVER, REC	
* 235	3-362-948-01	LEVER, PLAY	
* 236	3-362-949-01	LEVER, REW	
HE601	1-500-031-11	HEAD, MAGNETIC (ERASE)	
HRP601	1-500-005-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	

SECTION 8
ELECTRICAL PARTS LIST

CD MOTOR | LCD | LEAF SW | MAIN

NOTE :
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

- Abbreviations
  G : German
  IT : Italian
  EE : East European
  EA : Saudi Arabia
  C&SA: Central & South America
  TWN : Taiwan

Ref. No.	Part No.	Description	Remark
*	1-651-482-11	CD MOTOR BOARD(C&SA, TWN)	
*	1-651-482-31	CD MOTOR BOARD(EXCEPT C&SA, TWN)	
		**********	
		< CONNECTOR >	
* CN707	1-580-167-11	PIN, CONNECTOR (PC BOARD) 6P	
		< SWITCH >	
S701	1-571-936-11	SWITCH, LEAF(LCD DET)	
**********			
*	1-651-479-11	LCD BOARD(C&SA, TWN)	
*	1-651-479-31	LCD BOARD(EXCEPT C&SA, TWN)	
		*********	
		< CONNECTOR >	
* CNP802	1-565-937-11	SOCKET, CONNECTOR 13P	
* CNP802	1-568-856-11	SOCKET, CONNECTOR 13P	
		< LIQUID CRYSTAL DISPLAY >	
LCD801	1-810-442-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< SWITCH >	
S802	1-554-937-11	SWITCH, KEY BOARD(PLAY/PAUSE)	
S803	1-554-937-11	SWITCH, KEY BOARD(STOP)	
S804	1-554-937-11	SWITCH, KEY BOARD(AMS/SEARCH)	
S805	1-554-937-11	SWITCH, KEY BOARD(AMS/SEARCH)	
**********			
*	1-651-481-11	LEAF SW BOARD(C&SA, TWN)	
*	1-651-481-31	LEAF SW BOARD(EXCEPT C&SA, TWN)	
		**********	
		< CONNECTOR >	
* CNP801	1-580-154-11	PIN, CONNECTOR (PC BOARD) 2P	

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S801	1-571-936-11	SWITCH, LEAF(DOOR OPEN)	
**********			
*	A-3276-381-A	MAIN BOARD, COMPLETE(EXCEPT C&SA, TWN)	
*	A-3276-492-A	MAIN BOARD, COMPLETE(C&SA, TWN)	
		**********	
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
		< CAPACITOR >	
C101	1-124-903-11	ELECT 1uF 20% 50V	
C102	1-162-282-31	CERAMIC 100PF 10% 50V	
C103	1-124-126-00	ELECT 47uF 20% 10V	
C104	1-162-844-11	CERAMIC 0.027uF 10% 16V	
C105	1-124-903-11	ELECT 1uF 20% 50V	
C106	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C107	1-161-043-00	CERAMIC 0.0022uF 10% 50V	
C109	1-161-375-00	CERAMIC 0.0022uF 20% 50V	
C110	1-162-842-11	CERAMIC 0.018uF 10% 16V	
C111	1-124-927-11	ELECT 4.7uF 20% 100V	
C112	1-162-290-31	CERAMIC 470PF 10% 50V	
C113	1-136-165-00	FILM 0.1uF 5% 50V	
C114	1-124-473-11	ELECT 1000uF 20% 10V	
C116	1-124-126-00	ELECT 47uF 20% 10V	
C117	1-162-282-31	CERAMIC 100PF 10% 50V	
C118	1-162-282-31	CERAMIC 100PF 10% 50V	
C122	1-124-443-00	ELECT 100uF 20% 10V	
C201	1-124-903-11	ELECT 1uF 20% 50V	
C202	1-162-282-31	CERAMIC 100PF 10% 50V	
C203	1-124-126-00	ELECT 47uF 20% 10V	
C204	1-162-844-11	CERAMIC 0.027uF 10% 16V	
C205	1-124-903-11	ELECT 1uF 20% 50V	
C206	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C207	1-161-043-00	CERAMIC 0.0022uF 10% 50V	
C209	1-161-375-00	CERAMIC 0.0022uF 20% 50V	

Ref. No.	Part No.	Description			Remark
C210	1-162-842-11	CERAMIC	0.018uF	10%	16V
C211	1-124-927-11	ELECT	4.7uF	20%	100V
C212	1-162-290-31	CERAMIC	470PF	10%	50V
C213	1-136-165-00	FILM	0.1uF	5%	50V
C214	1-124-473-11	ELECT	1000uF	20%	10V
C216	1-124-126-00	ELECT	47uF	20%	10V
C217	1-162-282-31	CERAMIC	100PF	10%	50V
C218	1-162-282-31	CERAMIC	100PF	10%	50V
C222	1-124-443-00	ELECT	100uF	20%	10V
C301	1-126-233-11	ELECT	22uF	20%	50V
C302	1-126-962-11	ELECT	3.3uF	20%	50V
C303	1-124-472-11	ELECT	470uF	20%	10V
C304	1-161-379-00	CERAMIC	0.01uF	20%	25V
C305	1-161-379-00	CERAMIC	0.01uF	20%	25V
C313	1-130-481-00	MYLAR	0.0068uF	5%	50V
C314	1-124-443-00	ELECT	100uF	20%	10V
C315	1-161-041-00	CERAMIC	0.0015uF	10%	50V
C317	1-124-120-11	ELECT	220uF	20%	25V
C318	1-126-937-11	ELECT	4700uF	20%	16V
C321	1-161-379-00	CERAMIC	0.01uF	20%	25V
C322	1-161-379-00	CERAMIC	0.01uF	20%	25V
C324	1-126-176-11	ELECT	220uF	20%	10V
C325	1-161-379-00	CERAMIC	0.01uF	20%	25V
C326	1-161-379-00	CERAMIC	0.01uF	20%	25V
C328	1-126-176-11	ELECT	220uF	20%	10V
C332	1-124-907-11	ELECT	10uF	20%	50V
C333	1-126-233-11	ELECT	22uF	20%	50V
C335	1-162-282-31	CERAMIC	100PF	10%	50V
C336	1-124-902-00	ELECT	0.47uF	20%	50V
C701	1-161-050-00	CERAMIC	0.0082uF	10%	16V (C&SA, TWN)
C702	1-136-165-00	FILM	0.1uF	5%	50V
C703	1-136-165-00	FILM	0.1uF	5%	50V
C704	1-136-165-00	FILM	0.1uF	5%	50V
C705	1-131-375-00	TANTALUM	4.7uF	10%	10V
C706	1-130-489-00	MYLAR	0.033uF	5%	50V
C707	1-130-486-00	MYLAR	0.018uF	10%	50V
C708	1-162-215-31	CERAMIC	47PF	5%	50V (C&SA, TWN)
C708	1-162-199-31	CERAMIC	10PF	5%	50V (EXCEPT C&SA, TWN)
C709	1-126-962-11	ELECT	3.3uF	20%	50V
C710	1-130-493-00	MYLAR	0.068uF	5%	50V
C711	1-162-215-31	CERAMIC	47PF	5%	50V
C713	1-130-489-00	MYLAR	0.033uF	5%	50V
C714	1-161-379-00	CERAMIC	0.01uF	20%	25V
C715	1-130-489-00	MYLAR	0.033uF	5%	50V
C716	1-130-483-00	MYLAR	0.01uF	5%	50V
C718	1-124-907-11	ELECT	10uF	20%	50V
C719	1-130-483-00	MYLAR	0.01uF	5%	50V
C720	1-130-483-00	MYLAR	0.01uF	5%	50V
C721	1-130-491-00	MYLAR	0.047uF	5%	50V
C722	1-161-494-00	CERAMIC	0.022uF		25V
C723	1-136-165-00	FILM	0.1uF	5%	50V
C724	1-124-126-00	ELECT	47uF	20%	10V
C727	1-162-294-31	CERAMIC	0.001uF	10%	50V
C728	1-136-165-00	FILM	0.1uF	5%	50V
C729	1-124-126-00	ELECT	47uF	20%	10V (EXCEPT C&SA, TWN)
C729	1-126-176-11	ELECT	220uF	20%	10V (C&SA, TWN)
C730	1-126-176-11	ELECT	220uF	20%	10V
C731	1-162-290-31	CERAMIC	470PF	10%	50V
C731	1-162-294-31	CERAMIC	0.001uF	10%	50V
C732	1-130-484-00	MYLAR	0.012uF	5%	50V
C733	1-162-294-31	CERAMIC	0.001uF	10%	50V
C734	1-130-481-00	MYLAR	0.0068uF	5%	50V
C735	1-162-215-31	CERAMIC	47PF	5%	50V
C736	1-162-290-31	CERAMIC	470PF	10%	50V
C738	1-162-194-31	CERAMIC	3.9PF	10%	50V
C739	1-124-126-00	ELECT	47uF	20%	10V
C740	1-162-290-31	CERAMIC	470PF	10%	50V
C741	1-124-126-00	ELECT	47uF	20%	10V
C742	1-136-173-00	FILM	0.47uF	5%	50V
C743	1-161-379-00	CERAMIC	0.01uF	20%	25V
C744	1-162-286-31	CERAMIC	220PF	10%	50V
C745	1-136-169-00	FILM	0.22uF	5%	50V
C746	1-161-379-00	CERAMIC	0.01uF	20%	25V
C747	1-161-329-00	CERAMIC	0.0068uF	20%	16V
C748	1-162-294-31	CERAMIC	0.001uF	10%	50V (C&SA, TWN)
C749	1-162-282-31	CERAMIC	100PF	10%	50V
C750	1-161-379-00	CERAMIC	0.01uF	20%	25V
C751	1-161-379-00	CERAMIC	0.01uF	20%	25V
C752	1-102-942-00	CERAMIC	5.0PF	+-0.5PF	50V
C753	1-102-942-00	CERAMIC	5.0PF	+-0.5PF	50V
C754	1-124-126-00	ELECT	47uF	20%	10V
C755	1-162-294-31	CERAMIC	0.001uF	10%	50V
C756	1-161-379-00	CERAMIC	0.01uF	20%	25V (EXCEPT C&SA, TWN)
C757	1-161-379-00	CERAMIC	0.01uF	20%	25V
C758	1-124-907-11	ELECT	10uF	20%	50V (C&SA, TWN)
C760	1-162-288-31	CERAMIC	330PF	10%	50V
C761	1-162-217-31	CERAMIC	56PF	5%	50V
C762	1-162-217-31	CERAMIC	56PF	5%	50V
C763	1-162-293-31	CERAMIC	820PF	10%	50V
C764	1-124-927-11	ELECT	4.7uF	20%	100V
C765	1-162-290-31	CERAMIC	470PF	10%	50V

MAIN

Ref.No.	Part No.	Description			Remark
C766	1-162-282-31	CERAMIC	100PF	10% 50V	
C770	1-162-288-31	CERAMIC	330PF	10% 50V	
C771	1-162-217-31	CERAMIC	56PF	5% 50V	
C772	1-162-217-31	CERAMIC	56PF	5% 50V	
C773	1-162-293-31	CERAMIC	820PF	10% 50V	
C774	1-124-927-11	ELECT	4.7uF	20% 100V	
C775	1-162-290-31	CERAMIC	470PF	10% 50V	
C776	1-162-282-31	CERAMIC	100PF	10% 50V	
C780	1-124-126-00	ELECT	47uF	20% 10V	
C781	1-126-176-11	ELECT	220uF	20% 10V	
C782	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C783	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C790	1-124-902-00	ELECT	0.47uF	20% 50V	
C791	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C800	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C801	1-124-902-00	ELECT	0.47uF	20% 50V	
C802	1-130-483-00	MYLAR	0.01uF	5% 50V	
C803	1-104-792-51	ELECT	33uF	20% 16V	
C804	1-124-907-11	ELECT	10uF	20% 50V	(C&SA, TWN)
		< CONNECTOR >			
* CNP301	1-580-154-11	PIN, CONNECTOR (PC BOARD) 2P			
CNP302	1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P			
CNP303	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
CNP306	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
CNP307	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
* CNP701	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P			
* CNP702	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P			
* CNP703	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P			
* CNP704	1-568-832-11	SOCKET, CONNECTOR 13P			
* CNP704	1-569-930-11	SOCKET, CONNECTOR 13P			
* CNP705	1-580-154-11	PIN, CONNECTOR (PC BOARD) 2P			
		< DIODE >			
D301	8-719-901-33	DIODE	1SS133T-77		
D302	8-719-901-33	DIODE	1SS133T-77		
D303	8-719-901-33	DIODE	1SS133T-77		
D305	8-719-109-97	DIODE	RD6.8ES-B2		
D306	8-719-938-69	LED	GL3PR8(OPR/BATT)		
D307	8-719-109-89	DIODE	RD5.6ESB2		
D308	8-719-901-33	DIODE	1SS133T-77		
D309	8-719-109-69	DIODE	RD3.6ES-B2		
D310	8-719-901-33	DIODE	1SS133T-77		
		< IC >			
IC301	8-759-942-24	IC	BA3312N		
IC302	8-759-820-22	IC	LA4597		
IC701	8-752-070-23	IC	CXA1962Q		
IC702	8-752-361-16	IC	CXD2518Q		
IC703	8-759-518-59	IC	BA6296FP		
IC705	8-759-909-71	IC	BA4558F		
IC801	8-752-855-67	IC	CXP5084H-675Q		
IC802	8-759-256-72	IC	PST994D-T		
		< JACK >			
J302	1-566-891-11	JACK(PHONE)			
		< CABLE HOLDER >			
* KH708	1-573-287-11	HOLDER, CABLE 2P			
* KH709	1-573-287-11	HOLDER, CABLE 2P			
		< COIL >			
L101	1-410-509-11	INDUCTOR	10uH		
L201	1-410-509-11	INDUCTOR	10uH		
L301	1-410-509-11	INDUCTOR	10uH		
L702	1-410-513-11	INDUCTOR	22uH		
L703	1-410-513-11	INDUCTOR	22uH		
L707	1-410-397-21	FERRITE BEAD INDUCTOR			
L708	1-410-397-21	FERRITE BEAD INDUCTOR			
L709	1-410-397-21	FERRITE BEAD INDUCTOR			
L710	1-410-397-21	FERRITE BEAD INDUCTOR			
L711	1-410-397-21	FERRITE BEAD INDUCTOR			
L712	1-410-513-11	INDUCTOR	22uH		
L713	1-410-513-11	INDUCTOR	22uH		
L714	1-410-397-21	FERRITE BEAD INDUCTOR			
L715	1-410-509-11	INDUCTOR	10uH		
L716	1-414-142-11	INDUCTOR	1uH		
L760	1-410-397-21	FERRITE BEAD INDUCTOR			
L770	1-410-397-21	FERRITE BEAD INDUCTOR			
L780	1-410-397-21	FERRITE BEAD INDUCTOR			
		< TRANSISTOR >			
Q101	8-729-900-74	TRANSISTOR	DTC143TS		
Q201	8-729-900-74	TRANSISTOR	DTC143TS		
Q301	8-729-194-57	TRANSISTOR	2SC945-P		
Q302	8-729-921-65	TRANSISTOR	DTC143ES		
Q303	8-729-905-67	TRANSISTOR	2SD1944-K		
Q304	8-729-011-92	TRANSISTOR	2SC2001TP-K1K2		
Q305	8-729-921-65	TRANSISTOR	DTC143ES		
Q306	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q307	8-729-921-65	TRANSISTOR	DTC143ES		
Q308	8-729-900-74	TRANSISTOR	DTC143TS		
Q701	8-729-801-84	TRANSISTOR	2SB1013-4		
Q702	8-729-900-85	TRANSISTOR	DTC144WS		
Q703	8-729-900-74	TRANSISTOR	DTC143TS		
Q705	8-729-902-80	TRANSISTOR	DTA114YS		
Q760	8-729-900-74	TRANSISTOR	DTC143TS		

Ref. No.	Part No.	Description				Remark
Q770	8-729-900-74	TRANSISTOR DTC143TS				
		< RESISTOR >				
R101	1-249-417-11	CARBON	1K	5%	1/4W	
R102	1-249-404-00	CARBON	82	5%	1/4W	
R103	1-249-425-11	CARBON	4.7K	5%	1/4W	
R104	1-247-854-11	CARBON	9.1K	5%	1/4W	
R105	1-247-887-00	CARBON	220K	5%	1/4W	
R107	1-249-425-11	CARBON	4.7K	5%	1/4W	
R108	1-249-431-11	CARBON	15K	5%	1/4W	
R109	1-249-404-00	CARBON	82	5%	1/4W	
R110	1-249-421-11	CARBON	2.2K	5%	1/4W	
R111	1-249-441-11	CARBON	100K	5%	1/4W	
R112	1-249-417-11	CARBON	1K	5%	1/4W	
R115	1-249-399-11	CARBON	33	5%	1/4W	
R116	1-249-429-11	CARBON	10K	5%	1/4W	
R117	1-249-423-11	CARBON	3.3K	5%	1/4W	
R118	1-249-406-11	CARBON	120	5%	1/4W	
R201	1-249-417-11	CARBON	1K	5%	1/4W	
R202	1-249-404-00	CARBON	82	5%	1/4W	
R203	1-249-425-11	CARBON	4.7K	5%	1/4W	
R204	1-247-854-11	CARBON	9.1K	5%	1/4W	
R205	1-247-887-00	CARBON	220K	5%	1/4W	
R207	1-249-425-11	CARBON	4.7K	5%	1/4W	
R208	1-249-431-11	CARBON	15K	5%	1/4W	
R209	1-249-404-00	CARBON	82	5%	1/4W	
R210	1-249-421-11	CARBON	2.2K	5%	1/4W	
R211	1-249-441-11	CARBON	100K	5%	1/4W	
R212	1-249-417-11	CARBON	1K	5%	1/4W	
R215	1-249-399-11	CARBON	33	5%	1/4W	
R216	1-249-429-11	CARBON	10K	5%	1/4W	
R217	1-249-423-11	CARBON	3.3K	5%	1/4W	
R218	1-249-406-11	CARBON	120	5%	1/4W	
R301	1-247-903-00	CARBON	1M	5%	1/4W	
R302	1-247-807-11	CARBON	100	5%	1/4W	
R306	1-249-406-11	CARBON	120	5%	1/4W	
R307	1-249-434-11	CARBON	27K	5%	1/4W	
R308	1-249-389-11	CARBON	4.7	5%	1/4W	
R309	1-249-409-11	CARBON	220	5%	1/4W	
R312	1-249-417-11	CARBON	1K	5%	1/4W	
R313	1-249-420-11	CARBON	1.8K	5%	1/4W	
R314	1-247-828-11	CARBON	750	5%	1/4W	
R315	1-247-816-11	CARBON	240	5%	1/4W	
R316	1-249-441-11	CARBON	100K	5%	1/4W	
R317	1-249-411-11	CARBON	330	5%	1/4W	
R318	1-249-417-11	CARBON	1K	5%	1/4W	
R319	1-247-807-11	CARBON	100	5%	1/4W	
R320	1-249-393-11	CARBON	10	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R321	1-249-437-11	CARBON	47K	5%	1/4W	
R332	1-249-425-11	CARBON	4.7K	5%	1/4W	
R333	1-249-425-11	CARBON	4.7K	5%	1/4W	
R335	1-249-429-11	CARBON	10K	5%	1/4W	
R700	1-249-417-11	CARBON	1K	5%	1/4W	
R701	1-249-441-11	CARBON	100K	5%	1/4W	
R702	1-247-896-11	CARBON	510K	5%	1/4W	
R703	1-249-438-11	CARBON	56K	5%	1/4W	
R704	1-249-441-11	CARBON	100K	5%	1/4W	
R705	1-249-437-11	CARBON	47K	5%	1/4W	
R706	1-247-883-00	CARBON	150K	5%	1/4W	
R707	1-249-432-11	CARBON	18K	5%	1/4W	
R708	1-247-883-00	CARBON	150K	5%	1/4W	
R709	1-249-435-11	CARBON	33K	5%	1/4W	(EXCEPT C&SA, TWN)
R709	1-249-436-11	CARBON	39K	5%	1/4W	(C&SA, TWN)
R710	1-249-429-11	CARBON	10K	5%	1/4W	
R711	1-249-417-11	CARBON	1K	5%	1/4W	
R712	1-249-441-11	CARBON	100K	5%	1/4W	
R713	1-247-883-00	CARBON	150K	5%	1/4W	
R714	1-247-883-00	CARBON	150K	5%	1/4W	
R715	1-247-901-11	CARBON	820K	5%	1/4W	
R718	1-247-899-11	CARBON	680K	5%	1/4W	
R720	1-247-891-00	CARBON	330K	5%	1/4W	
R721	1-247-895-00	CARBON	470K	5%	1/4W	
R722	1-247-903-00	CARBON	1M	5%	1/4W	
R723	1-249-417-11	CARBON	1K	5%	1/4W	
R727	1-249-417-11	CARBON	1K	5%	1/4W	
R728	1-249-429-11	CARBON	10K	5%	1/4W	
R729	1-249-429-11	CARBON	10K	5%	1/4W	
R730	1-249-435-11	CARBON	33K	5%	1/4W	
R731	1-249-433-11	CARBON	22K	5%	1/4W	
R732	1-249-429-11	CARBON	10K	5%	1/4W	
R733	1-249-435-11	CARBON	33K	5%	1/4W	
R734	1-249-441-11	CARBON	100K	5%	1/4W	
R735	1-249-426-11	CARBON	5.6K	5%	1/4W	
R740	1-249-423-11	CARBON	3.3K	5%	1/4W	
R741	1-249-417-11	CARBON	1K	5%	1/4W	
R742	1-249-429-11	CARBON	10K	5%	1/4W	
R743	1-247-903-00	CARBON	1M	5%	1/4W	
R744	1-247-887-00	CARBON	220K	5%	1/4W	
R745	1-247-856-00	CARBON	11K	5%	1/4W	
R746	1-249-437-11	CARBON	47K	5%	1/4W	
R747	1-249-429-11	CARBON	10K	5%	1/4W	
R750	1-249-417-11	CARBON	1K	5%	1/4W	
R751	1-249-389-11	CARBON	4.7	5%	1/4W	
R751	1-249-417-11	CARBON	1K	5%	1/4W	
R752	1-249-429-11	CARBON	10K	5%	1/4W	
R760	1-249-429-11	CARBON	10K	5%	1/4W	

MAIN POWER

Ref. No.	Part No.	Description			Remark
R761	1-249-429-11	CARBON	10K	5% 1/4W	
R762	1-249-437-11	CARBON	47K	5% 1/4W	
R763	1-249-437-11	CARBON	47K	5% 1/4W	
R764	1-249-434-11	CARBON	27K	5% 1/4W	
R765	1-249-434-11	CARBON	27K	5% 1/4W	
R766	1-249-417-11	CARBON	1K	5% 1/4W	
R770	1-249-429-11	CARBON	10K	5% 1/4W	
R771	1-249-429-11	CARBON	10K	5% 1/4W	
R772	1-249-437-11	CARBON	47K	5% 1/4W	
R773	1-249-437-11	CARBON	47K	5% 1/4W	
R774	1-249-434-11	CARBON	27K	5% 1/4W	
R775	1-249-434-11	CARBON	27K	5% 1/4W	
R776	1-249-417-11	CARBON	1K	5% 1/4W	
R780	1-247-807-11	CARBON	100	5% 1/4W	
R781	1-249-429-11	CARBON	10K	5% 1/4W	
R782	1-249-431-11	CARBON	15K	5% 1/4W	
R790	1-249-393-11	CARBON	10	5% 1/4W	
R801	1-249-435-11	CARBON	33K	5% 1/4W	
R802	1-249-435-11	CARBON	33K	5% 1/4W	
R803	1-249-435-11	CARBON	33K	5% 1/4W	
R806	1-249-437-11	CARBON	47K	5% 1/4W	
R807	1-249-429-11	CARBON	10K	5% 1/4W	
R808	1-249-429-11	CARBON	10K	5% 1/4W	
R809	1-249-429-11	CARBON	10K	5% 1/4W	
R810	1-249-429-11	CARBON	10K	5% 1/4W	
R811	1-249-429-11	CARBON	10K	5% 1/4W	
R812	1-249-429-11	CARBON	10K	5% 1/4W	
R813	1-249-429-11	CARBON	10K	5% 1/4W	
R814	1-249-429-11	CARBON	10K	5% 1/4W	
R815	1-249-421-11	CARBON	2.2K	5% 1/4W	
		< VARIABLE RESISTOR >			
RV301	1-223-403-11	RES, VAR, CARBON 20K/20K(VOLUME)			
RV302	1-241-745-11	RES, VAR, CARBON 20K/20K(TONE)			
RV701	1-238-017-11	RES, ADJ, CARBON 22K(F-GAIN, CD)			
RV702	1-238-017-11	RES, ADJ, CARBON 22K(F-BIAS, CD)			
		< SWITCH >			
S301	1-572-627-11	SWITCH, SLIDE(RECORD/PLAYBACK)			
S302	1-572-236-11	SWITCH, LEVER SLIDE (FUNCTION CD/RADIO(FM/AM)/TAPE)			
		< TRANSFORMER >			
T301	1-433-268-00	TRANSFORMER, BIAS OSCILLATOR			
		< VIBRATOR >			
X701	1-760-217-11	VIBRATOR, CERAMIC(32.89MHz)			
**********					

Ref. No.	Part No.	Description			Remark
*	1-651-478-11	POWER BOARD(C&SA, TWN)			
*	1-651-478-31	POWER BOARD(EXCEPT C&SA, TWN)			
		**********			
	1-533-217-31	HOLDER, FUSE			
		< CAPACITOR >			
C901	1-101-005-00	CERAMIC	22000PF	50V	
C902	1-101-005-00	CERAMIC	22000PF	50V	
C903	1-101-005-00	CERAMIC	22000PF	50V	
C904	1-101-005-00	CERAMIC	22000PF	50V	
C905	1-136-169-00	FILM	0.22uF	5% 50V	
		< JACK >			
⚠CNJ901	1-526-838-11	INLET, AC 2P(AC IN~)(EXCEPT C&SA, TWN)			
⚠CNJ901	1-526-818-11	INLET, AC(AC IN~)(C&SA, TWN)			
		< DIODE >			
D901	8-719-031-53	DIODE LT2A02			
D902	8-719-031-53	DIODE LT2A02			
D903	8-719-031-53	DIODE LT2A02			
D904	8-719-031-53	DIODE LT2A02			
		< FUSE >			
⚠F901	1-532-235-00	FUSE(315mA 250V)(E, EA)			
⚠F902	1-532-286-00	FUSE(2.5A 250V)(EXCEPT C&SA, TWN)			
⚠F902	1-576-107-11	FUSE(3.15A 125V)(C&SA, TWN)			
		< CABLE HOLDER >			
* KH901	1-573-287-11	HOLDER, CABLE 2P			
		< LINE FILTER >			
⚠LF901	1-424-150-11	TRANSFORMER, LINE FILTER			
		< SWITCH >			
⚠S901	1-572-290-11	SWITCH, POWER (VOLTAGE CHANGE) (E, EA)			
		< TRANSFORMER >			
⚠T901	1-426-632-11	TRANSFORMER, POWER(AEP, G, IT, EE)			
⚠T901	1-426-634-11	TRANSFORMER, POWER(UK, AUS)			
⚠T901	1-426-631-11	TRANSFORMER, POWER(C&SA, TWN)			
⚠T901	1-426-633-11	TRANSFORMER, POWER(E, EA)			
**********					

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
*	A-3269-336-A	TUNER BOARD, COMPLETE(E, AUS)			
*	A-3269-237-A	TUNER BOARD, COMPLETE(IT)			
*	A-3269-339-A	TUNER BOARD, COMPLETE(C&SA, TWN)			
*	A-3269-240-A	TUNER BOARD, COMPLETE(AEP, UK, G)			
*	A-3269-356-A	TUNER BOARD, COMPLETE(EA)			
*	A-3269-393-A	TUNER BOARD, COMPLETE(EE)			
		**********			
		< FILTER >			
BPF1	1-236-711-21	FILTER, BAND PASS(EXCEPT EE)			
BPF1	1-239-907-21	FILTER, BAND PASS(EE)			
		< CAPACITOR >			
C2	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C3	1-124-443-00	ELECT	100uF	20% 10V	
C4	1-162-190-31	CERAMIC	1.8PF	20% 50V	
C5	1-162-208-31	CERAMIC	24PF	5% 50V	(AEP, UK, G, IT)
C5	1-162-206-31	CERAMIC	20PF	5% 50V	(E, C&SA, AUS, EA, TWN)
C5	1-162-199-31	CERAMIC	10PF	5% 50V(EE)	
C6	1-102-961-00	CERAMIC	27PF	5% 50V	(AEP, UK, G, IT)
C6	1-102-959-00	CERAMIC	22PF	5% 50V	(E, C&SA, AUS, EA, TWN)
C6	1-162-199-31	CERAMIC	10PF	5% 50V(EE)	
C7	1-162-197-31	CERAMIC	6.8PF	10% 50V	
C8	1-162-193-31	CERAMIC	3.3PF	10% 50V	
C9	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C10	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C11	1-124-927-11	ELECT	4.7uF	20% 100V	
C12	1-124-903-11	ELECT	1uF	20% 50V	
C13	1-124-126-00	ELECT	47uF	20% 10V	
C14	1-124-443-00	ELECT	100uF	20% 10V	
C15	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C16	1-124-925-11	ELECT	2.2uF	20% 100V	
C17	1-124-443-00	ELECT	100uF	20% 10V	
C18	1-162-843-11	CERAMIC	0.022uF	10% 16V	(AEP, UK, G, IT, EE)
C18	1-162-844-11	CERAMIC	0.027uF	10% 16V	(E, C&SA, AUS, EA, TWN)
C19	1-162-843-11	CERAMIC	0.022uF	10% 16V	(AEP, UK, G, IT, EE)
C19	1-162-844-11	CERAMIC	0.027uF	10% 16V	(E, C&SA, AUS, EA, TWN)
C20	1-124-902-00	ELECT	0.47uF	20% 50V	
C21	1-124-902-00	ELECT	0.47uF	20% 50V	
C22	1-124-903-11	ELECT	1uF	20% 50V	
C23	1-124-902-00	ELECT	0.47uF	20% 50V	
C24	1-124-927-11	ELECT	4.7uF	20% 100V	
C31	1-162-294-31	CERAMIC	0.001uF	10% 50V	(AEP, UK, G, IT, EE)
C32	1-162-294-31	CERAMIC	0.001uF	10% 50V	(AEP, UK, G, IT, EE)
		< FILTER >			
CF1	1-760-237-11	FILTER, CERAMIC			
CF3	1-760-237-11	FILTER, CERAMIC			
		< COMPOSITION CIRCUIT BLOCK >			
CFT1	1-239-724-11	ENCAPSULATED COMPONENT			
		< CONNECTOR >			
CN1	1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P			
		< VARIABLE CAPACITOR >			
CT1-4, CV1-4	1-141-484-11	CAP, VAR(EXCEPT EE)			
CT1-4, CV1-4	1-151-697-11	CAP, VAR(EE)			
		< IC >			
IC1	8-752-050-20	IC CXA1238S			
		< COIL >			
* L1	1-422-181-11	COIL, AIR-CORE(EXCEPT EE)			
L1	1-409-776-11	COIL, AIR-CORE(EE)			
L2	1-422-230-11	COIL, AIR-CORE(EXCEPT EE, IT)			
L2	1-406-957-11	COIL (WITH CORE)(IT)			
L2	1-409-775-11	COIL, AIR-CORE(EE)			
L3	1-402-577-31	ANTENNA, FERRITE-ROD (MW)			
L4	1-406-464-41	COIL (OSC)			
		< TRANSISTOR >			
Q1	8-729-904-36	TRANSISTOR DTC114YS			
		< RESISTOR >			
R2	1-249-421-11	CARBON	2.2K	5% 1/4W	
R3	1-249-441-11	CARBON	100K	5% 1/4W	
R5	1-249-429-11	CARBON	10K	5% 1/4W	
R7	1-249-404-00	CARBON	82	5% 1/4W	
R8	1-249-427-11	CARBON	6.8K	5% 1/4W	
R9	1-249-427-11	CARBON	6.8K	5% 1/4W	
R10	1-249-435-11	CARBON	33K	5% 1/4W	(AEP, UK, G, IT, EE)
R11	1-247-887-00	CARBON	220K	5% 1/4W	
R12	1-249-421-11	CARBON	2.2K	5% 1/4W	
R13	1-247-807-11	CARBON	100	5% 1/4W	

TUNER

Ref.No.	Part No.	Description	Remark
R14	1-249-411-11	CARBON 330 5% 1/4W	
R15	1-247-887-00	CARBON 220K 5% 1/4W	
		< VARIABLE RESISTOR >	
RV1	1-238-017-11	RES, ADJ, CARBON 22K(VCO)	
		< SWITCH >	
SW1	1-692-928-11	SWITCH, SLIDE(MONO/STEREO)	(AEP, UK, G, IT, EE)
**********			
		MISCELLANEOUS	
		**********	
9	1-765-085-11	WIRE, PARALLEL (FFC) (13 CORE)	
13	1-501-388-11	ANTENNA, TELESCOPIC	
104	1-452-732-11	MAGNET	
119	1-467-655-11	PICKUP UNIT, OPTICAL	
HE601	1-500-031-11	HEAD, MAGNETIC (ERASE)	
HRP601	1-500-005-11	HEAD, MAGNETIC(RECORD/PLAYBACK)	
M601	X-3366-491-1	MOTOR ASSY	
S601	1-572-304-11	SWITCH, LEAF	
SP901	1-504-505-21	SPEAKER (10CM)(L-CH)	
SP902	1-504-505-21	SPEAKER (10CM)(R-CH)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
⚠	1-551-983-00	CORD, POWER(E:110-120V AC AREA)	
⚠	1-555-234-00	CORD, POWER(E:220-240V AC AREA)	
⚠	1-557-287-11	CORD, POWER(C&SA, TWN)	
⚠	1-569-007-11	ADAPTER, CONVERSION 2P	(E:110-120V AC AREA)
⚠	1-569-008-11	ADAPTER, CONVERSION 2P(EA)	
⚠	1-575-131-11	CORD, POWER SUPPLY(AEP, G, IT, EA, EE)	
⚠	1-696-819-11	CORD, POWER(AUS)	
⚠	1-751-214-11	CORD, POWER(UK)	
	3-758-224-11	MANUAL, INSTRUCTION(ENGLISH/FRENCH/ GERMAN/SPANISH)	(CFD-8:AEP, UK, E, C&SA, G, EA)
	3-758-224-21	MANUAL, INSTRUCTION(ENGLISH)	(CFD-8:AUS, TWN)
	3-758-224-41	MANUAL, INSTRUCTION(DUTCH/SWEDISH/ ITALIAN/PORTUGUESE)	(CFD-8:AEP, IT)
	3-758-224-51	MANUAL, INSTRUCTION(POLISH/ENGLISH/ GERMAN/RUSSIAN)	(CFD-8:EE)
	3-758-224-61	MANUAL, INSTRUCTION(CZECH/HUNGARIAN)	(CFD-8:EE)
	3-758-224-71	MANUAL, INSTRUCTION(CHINESE)(TWN)	
	3-758-224-91	MANUAL, INSTRUCTION(DENMARK/FINNISH)	(CFD-8:AEP)
	3-758-398-11	MANUAL, INSTRUCTION(ENGLISH/FRENCH/ GERMAN/SPANISH)(CFD-7)	
	3-758-398-41	MANUAL, INSTRUCTION(DUTCH/SWEDISH/ ITALIAN/PORTUGUESE)(CFD-7)	
*	3-910-853-01	CUSHION (L)	
*	3-910-854-01	CUSHION (R)	
*	3-912-224-01	INDIVIDUAL CARTON(AUS, TWN)	
*	3-912-225-01	INDIVIDUAL CARTON(CFD-8:AEP, UK, G, IT, EE)	
*	3-912-226-01	INDIVIDUAL CARTON(CFD-8:E, C&SA, EA)	
*	3-914-535-01	INDIVIDUAL CARTON(CFD-7)	
*	4-941-548-01	LABEL, CLASS (1)(AEP, UK, G, IT, EA, EE)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#2	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#3	7-685-649-79	SCREW +P 3X14 TYPE2 NON-SLIT	
#4	7-682-548-04	SCREW +B 3X8	
#5	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
#6	7-621-773-95	SCREW +B 2.6X6	
#7	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#8	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#9	7-685-903-31	SCREW +PTPWH 3X10 (TYPE2)	
#10	7-628-254-05	SCREW +PS 2.6X5	
#11	7-685-861-01	SCREW +BVTT 2.6X5 (S)	
#12	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
#13	7-621-255-25	SCREW +PTT 2X4 (S)	
#14	7-682-547-09	SCREW +BTT 3X6 (S)	
#15	7-621-255-20	SCREW +PTT 2X4 (S)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-959-540-11

Sony Corporation
Consumer A&V Products Company
Personal A&V Products Div.

English
94D0283-1
Printed in Japan
©1994.4
Published by Home A&V Products Div.
Quality Engineering Dept.